Centricut®
LASER CONSUMABLES

Hypertherm Associates
Aftermarket Group

# 2026 catalog

For $CO_2$ and fiber laser consumables
Replacement parts suitable for Trumpf®





# Centricut delivers

- OEM quality nozzles, ceramics and optics
- Technical and application support from our OEM-trained technicians
- 100% satisfaction guarantee

# $CO_2$ and fiber laser nozzles

## Nozzle options

All Centricut nozzles are engineered and manufactured to the highest standards. Select the OEM quality nozzle best suited for your application needs

### Copper

Most commonly used nozzle offering good durability and nozzle life. Primary nozzle type for fiber lasers.

### Chrome plated

Shiny, mirror-like finish provides increased spatter resistance, improved durability and longer life than copper nozzles. Not recommended for use on fiber lasers.

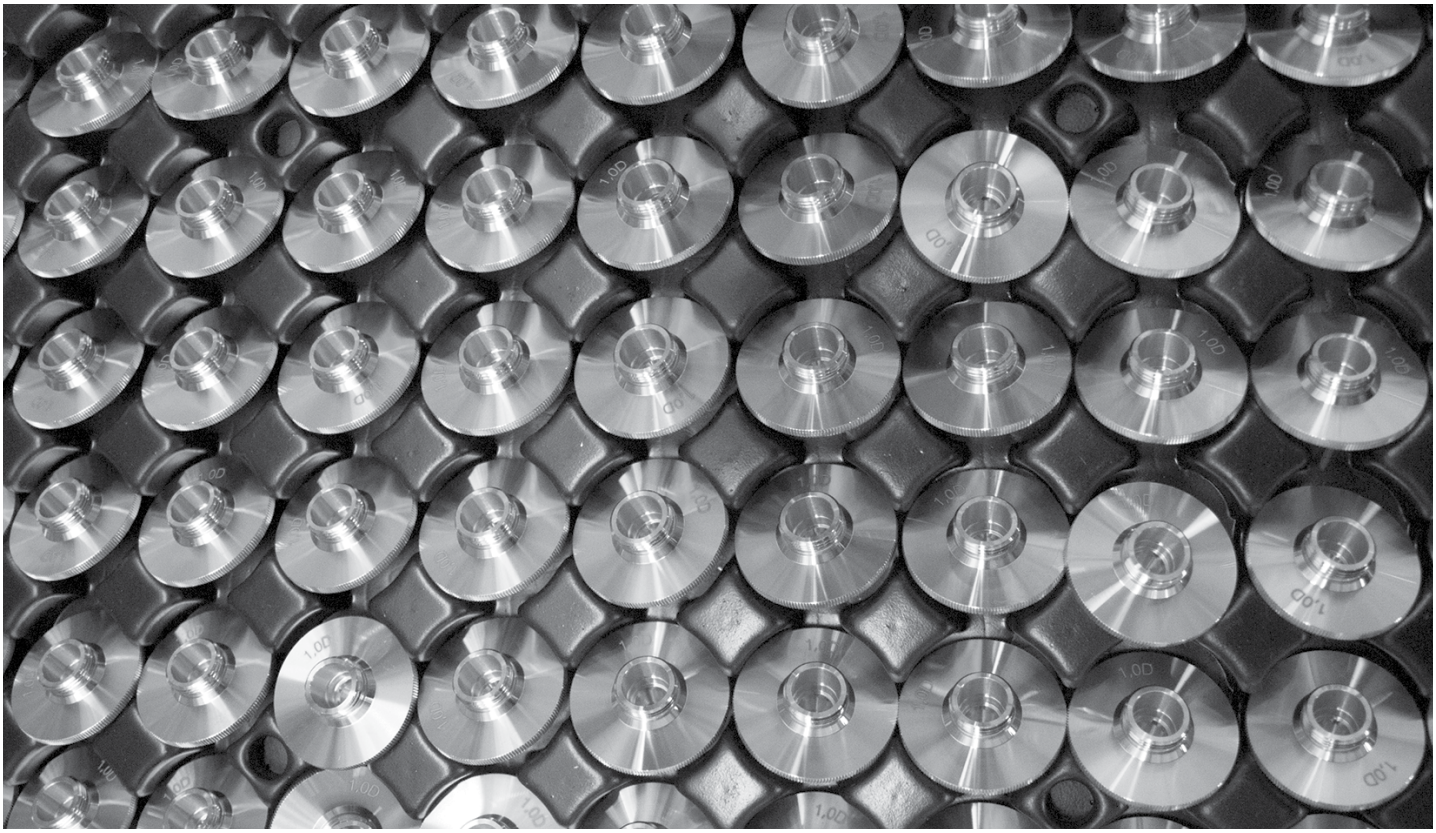
Look for CP in the part number to identify a chrome plated nozzle

### Hard chrome plated

Premium nozzles offering the highest level of durability and longest nozzle life. These nozzles are not as shiny as chrome plated and have a dull appearance. Not recommended for use on fiber lasers.

Look for HCP in the part number to identify a hard chrome nozzle.

| | |
|---|---|
| CP (chrome plated) | Nozzles plated with chrome for increased durability. These nozzles are easier to clean, resist damage due to 'tip-ups' and have better spatter resistance over non-plated nozzles. For use in all laser cutting applications. |
| Conical | Conical internal geometry for high pressure, non-ferrous cutting applications using nitrogen, air or argon. |
| Cylindrical | Cylindrical internal geometry for low pressure, mild steel cutting applications using oxygen. |
| Double | Insert pressed into a standard cylindrical nozzle for improved edge quality, laminar gas flow and spatter resistance. Primarily used in mild steel applications. |
| HCP (hard chrome plated) | Enhanced durability chrome plated nozzles. These nozzles are easier to clean, resist damage due to 'tip-ups' and have better spatter resistance over non-plated nozzles. For use in all laser cutting applications. |
| HP (high pressure) HD (high density) | Conical style nozzle for high pressure, non-ferrous cutting applications using nitrogen, air or argon. |
| Inner | Also referred to as a 'nozzle insert'. Works in conjunction with an outer nozzle to create a double nozzle. Primarily used in mild steel applications. |
| Low pressure | Cylindrical style nozzle for low pressure, mild steel cutting applications using oxygen. |
| Outer | Works in conjunction with an inner nozzle to create a double nozzle. Primarily used in mild steel applications. |
| Shower | Nozzles with a center orifice surrounded by smaller jets. The smaller jets focus the assist gas into the kerf, creating improved edge quality and the ability to cut thicker material. Primarily used in mild steel applications. |



# $CO_2$ and fiber laser optics

### Optics key

| Lens | |
|---|---|
| MEN | Meniscus |
| PLX | Plano-convex |
| MTD | Mounted |
| Not MTD | Not mounted |
| PO | Plano |
| MP5 or ULA | Ultra low absorption |
| AR | Anti-reflection |
| ZNSE | Zinc selenide |
| FS | Fused silica |
| DIA | Diameter |
| FL | Focal length |
| ET | Edge thickness |
| WD | Working distance |

## How to handle optics

Follow these easy steps, when cleaning or changing your optic, to help maximize the life and performance of your lens

- Avoid touching coated surfaces of the lens and hold the optic by its sides
- Wear powder-free finger cots or latex gloves when handling
- Do not use any tools or sharp objects when handling the optic or when removing it from its packaging
- Ensure the work surface is clean and free of oils, grease and dirt
- Do not place the optic on hard surfaces as they scratch easily
- Once the optic has been unpacked, carefully place it on the lens tissue in which it was originally wrapped

## Optics disposal

It is important to dispose of used laser optics at a licensed industrial waste facility which is in compliance with all local, state, and federal regulations. If you don't have access to a licensed industrial waste facility, and purchased your laser optics through Centricut, you may return them to Centricut for proper disposal. This service is only available to Centricut customers.

### All optics returned to Centricut must:

- Include return authorization and invoice numbers
- Be sealed in a plastic bag to minimize any hazards
- Remove excess ZnSe powder prior to sealing

*Acceptance of goods will be refused if not packaged correctly or if the return authorization number isn't included



# Optics

| Centricut part number | Reference number | Type | Material | Diameter | Focal length | Edge thickness |
|---|---|---|---|---|---|---|
| Fiber laser lens | | | | | | |
| NT375-7955 | | PLX | FS | 30 mm | 123 mm | 3.82 mm |
| TR300-9799 | 1869799 | PLX | FS | 30 mm | 146 mm | 8.0 mm |
| TR300-3107 | 1603107 | PLX | FS | 40 mm | 150 mm | 8.0 mm |
| AM313-0238 | 7710238, 71565737 | PLX | FS | 50.8 mm | 190 mm | 11.4 mm |
| SA384-0022 | 316-301-0022, 970128 | PLX | FS | 25.4 mm | 200 mm | 6.35 mm |
| SA384-0026 | 316-301-0026, ESTFL02119 | PLX | FS | 38.1 mm | 210 mm | 6.35 mm |
| PR361-8988NM | 968988, 344631 | PLX | FS | 1.5" | 5.0" | .280" |
| MB312-8858 | | PLX | FS | 2.0" | 7.5" | .45" |
| PR361-0773 | 970773/M15-15-B X-SP-7MM | PLX MTD | FS | 1.5" | 5.0" | .275" |
| PR361-8988 | LH968988PVL, 576.41.005 | PLX MTD | FS | 1.5" | 5.0" | .280" |

| Centricut part number | Reference number | Material | Diameter | Edge thickness |
|---|---|---|---|---|
| Fiber laser windows | | | | |
| PT317-1424 | P0588-1022-00001 | FS | 21.5 mm | 2.0 mm |
| PT317-0589 | 970397, 6930003260, P0589-360-00002, R26RT006410, R26ZZC90110 | FS | 22.35 mm | 4.0 mm |
| PT317-9360 | 6930003260, P0589-360-00001 | FS | 22.35 mm | 4.0 mm |
| MB312-2336 | 632336-117 | FS | 25.4 mm | 4.0 mm |
| RT300-0035 | 211LCG0035, 211LCG0037 | FS | 27.9 mm | 4.1 mm |
| PT317-0010 | P0253-1034-00001 | FS | 30.0 mm | 1.5 mm |
| TR300-6719 | 766719, P0795-1201-00002 | FS | 30.0 mm | 5.0 mm |
| SA384-0007 | 316-304-0007, ESTFL001407, 632755-117 | FS | 32.0 mm | 6.35 mm |
| BY314-5979 | 10086368, 10071591,5335979 | Sapphire | 34.0 mm | 2.8 mm |
| TR300-4767 | 1614767 | FS | 34.0 mm | 4.9 mm |
| PR361-0089 | 1057.81000.089 | FS | 35.0 mm | 1.5 mm |
| BY314-5746 | 968752, 10045746, 10-02-01-5511 | QTZ | 36.0 mm | 5.0 mm |
| PR361-0474 | 970474 | FS | 37.0 mm | 4.0 mm |
| PT317-1551 | P0595-61551, P0595-58601-61551 | FS | 37.0 mm | 7.0 mm |
| PT317-1425 | SCR-01 | FS | 38.0 mm | 5.2 mm |
| CN307-3987 | 913987, 71598028 | FS | 38.1 mm | 1.6 mm |
| MZ315-6850 | Z50ZZ016850 | FS | 42.0 mm | 9.0 mm |
| MZ315-5350 | Z50SA015350, W495 | FS | 42.0 mm | 9.0 mm |
| AM313-1308 | 71571308, 5172635 | FS | 45.0 mm | 3.0 mm |
| PT317-5919 | 77005919 | FS | 48.0 mm | 7.0 mm |
| PT317-1789 | 284.0402, 971789, 717062 | FS | 50.0 mm | 3.18 mm |
| MB312-0137 | 633744-137 | FS | 50.0 mm | 8.0 mm |
| AM313-0026 | 71570026 | FS | OCTAGONAL | 1.5 mm |
| TR300-2937 | | FS | 34.0 mm | 4.9 mm |
| AM313-6076 | | FS | 46.0 mm | 10.0 mm |

| Centricut part number | Reference number | Type | Material | Diameter | Focal length | Edge thickness |
|---|---|---|---|---|---|---|
| $CO_2$ lenses | | | | | | |
| TR300-0115 (Cut – No RFID) | | MEN | ZNSE | 1.969" | 4.528" | .350" |
| TR300-0130 (Cut – No RFID) | 400130LMA , 0380117, D40 Cut, 630790-117 | MEN | ZNSE | 1.575" | 5.118" | .295" |
| TR300-8123 | 518123 | MEN | ZNSE | 1.575" | 6.102" | .295" |
| TR300-0175 (Cut – No RFID) | 1330448, 62440 | MEN | ZNSE | 1.969" | 6.89" | .350" |
| TR300-0250 (Cut – No RFID) | 400250LMA, 0380115, D40 Cut, 630789-117 | MEN | ZNSE | 1.575" | 9.842" | .295" |
| TR300-2500 (Cut – No RFID) | 1330443, 62439 | MEN | ZNSE | 1.969" | 9.842" | .350" |
| LL342-1819 | 166634, 61819 | MEN | ZNSE | 1.1" | 5.0" | .236" |
| TR300-0163 | 350163, 861143, LMZ1.5-0.29-10.00-2048 | MEN | ZNSE | 1.5" | 10.0" | .290" |
| TR300-6477 | 726477 | MEN | ZNSE | 1.5" | 10.0" | .354" |
| BY314-0185 | 4-00185, 4-00372, 142375, 60603 | MEN | ZNSE | 1.5" | 3.75" | .236" |
| TR300-6104 | 346104, 61962, 831393 | MEN | ZNSE | 1.5" | 3.75" | .290" |
| BY314-0736 | 414323, 4-10736 | MEN | ZNSE | 1.5" | 3.75" | .354" |
| BY314-0186 | 60260, 507790, 4-00186. 110111 | MEN | ZNSE | 1.5" | 5.0" | .236" |
| TR300-8114 | 088114, 60696, 406294. 110109, 61014, 658108, 29100023, 6930001002 | MEN | ZNSE | 1.5" | 5.0" | .290" |
| BY314-5094 | 767963, 60615, 4-05094, 110113, 358186, 62710 | MEN | ZNSE | 1.5" | 5.0" | .354" |
| PR361-0004 | 62709, 621644, 120216 | MEN | ZNSE | 1.5" | 5.0" | .354" |
| PT317-0001 | 61851, 312370 | MEN | ZNSE | 1.5" | 7.5" | .125" |
| BY314-0187 | 784964, 60602, 4-00187, 110112 | MEN | ZNSE | 1.5" | 7.5" | .236" |
| TR300-7517 | 097517, 60697, 702232, 110110, 61983 | MEN | ZNSE | 1.5" | 7.5" | .290" |
| LL342-1171 | 61171 | MEN | ZNSE | 1.5" | 7.5" | .310" |
| BY314-5095 | 60616, 4-05095, 570721, 110114, 361129 | MEN | ZNSE | 1.5" | 7.5" | .354" |
| BY314-8637 | 698637 | MEN | ZNSE | 1.5" | 7.5" | .354" |
| TR300-1972 | 61961, 141972, 977976 | MEN | ZNSE | 1.5" | 8.85" | .290" |
| TR300-8123 | 518123 | MEN | ZNSE | 1.575" | 6.102" | .295" |
| LV333-0176 | 480176, 29100115 | MEN | ZNSE | 1.75" | 5.0" | .354" |
| LV333-1551 | 981551, LMZ2.0-0.380-10.0-2053, 29100061S | MEN | ZNSE | 2.0" | 10.0" | .380" |
| PT317-6326 | 206326 | MEN | ZNSE | 2.0" | 5.0" | .378" |
| LV333-1004 | 458138, LMZ2.0-0.380-5.00-2051, PLLMZ0024, 29100154 | MEN | ZNSE | 2.0" | 5.0" | .380" |
| CN307-2376 | 61405, 695399, 922376, 60698, 29100055 | MEN | ZNSE | 2.0" | 7.5" | .380" |
| AM313-0305 | 61161, 81140305, LPCZ-1.10-0.16-5.0-1044, PLLPZ0132, 561067 | PLX | ZNSE | 1.1" | 5.0" | .160" |
| AM313-6602 | 726602 | PLX | ZNSE | 1.1" | 7.5" | .160" |
| AM313-0657 | 600657, 71502030, LPCZ-1.5-0.30-10.0-1128 | PLX | ZNSE | 1.5" | 10.0" | .300" |
| TK374-2235 | 312235 | PLX | ZNSE | 1.5" | 12.5" | .300" |
| PT317-8950 | 148950 | PLX | ZNSE | 1.5" | 2.5" | .085" |
| MZ315-0130 | 60830, Z50MB000130, 962834, 766479 | PLX | ZNSE | 1.5" | 5.0" | .118" |
| TR300-0002 | 61163, LMZ1.5-0.16-5.00-2043, 706491, 907557, PLCZ-1.5-0.16-5.0-1116 | PLX | ZNSE | 1.5" | 5.0" | .160" |
| MZ315-0160 | 60770, 227092, Z50MB000130H, LPCZ-1.5-0.236-5.0-1122, 834-319-002 | PLX | ZNSE | 1.5" | 5.0" | .236" |
| PR361-9011 | 834-319-011, 60905, 658108, ZC15500300, Z50MB000400, 578662, MLL00016 | PLX | ZNSE | 1.5" | 5.0" | .300" |
| MB312-500 | W500, 60905, 110144, LPCZ-1.5-0.30-5.0-1125, PLLPZ0132 | PLX | ZNSE | 1.5" | 5.0" | .310" |
| CN307-8085 | 941031, 61001, 908085, ZC15513280, 110092, PLLPZ0033 | PLX | ZNSE | 1.5" | 5.0"WD | .280" |
| PR361-0003 | 60784, LPCZ-1.5-0.236-7.5-1123 | PLX | ZNSE | 1.5" | 7.5" | .236" |
| PR361-9012 | 834-319-012, 60906, 618938, 306068, 741363, 60882, 299133, 71501070NM, 62649 | PLX | ZNSE | 1.5" | 7.5" | .300" |
| MB312-018 | 60906, W018, 383862, 60906LA, W018, 62649ULA, 383862, 62649LA | PLX | ZNSE | 1.5" | 7.5" | .310" |
| CN307-9484 | 909484, 61002, 464497, 100096, LPCZ-1.5-0.280-5.13-1007, PLLPZ0052 | PLX | ZNSE | 1.5" | 7.5"WD | .280" |
| PT317-8275 | 628275, W502A, 630736-117 | PLX | ZNSE | 2.0" | 10.0" | .310" |
| PT317-0537 | 960537 | PLX | ZNSE | 2.0" | 10.0" | .380" |
| CN307-4498 | 154498, 926274 | PLX | ZNSE | 2.0" | 10.0"WD | .380" |
| TK374-7338 | 197338 | PLX | ZNSE | 2.0" | 11.25" | .310" |
| MZ315-5980 | 145980 | PLX | ZNSE | 2.0" | 5.0" | .300" |
| MB312-505 | W505, 110169, PLLPZ0162, 304725, 61003, Z50ZZ005160 | PLX | ZNSE | 2.0" | 5.0" | .310" |
| MZ315-0516A | 61019, Z50ZZ00516A, Z50ZZ013480, 81140307, 741363 | PLX | ZNSE | 2.0" | 5.0" | .380" |

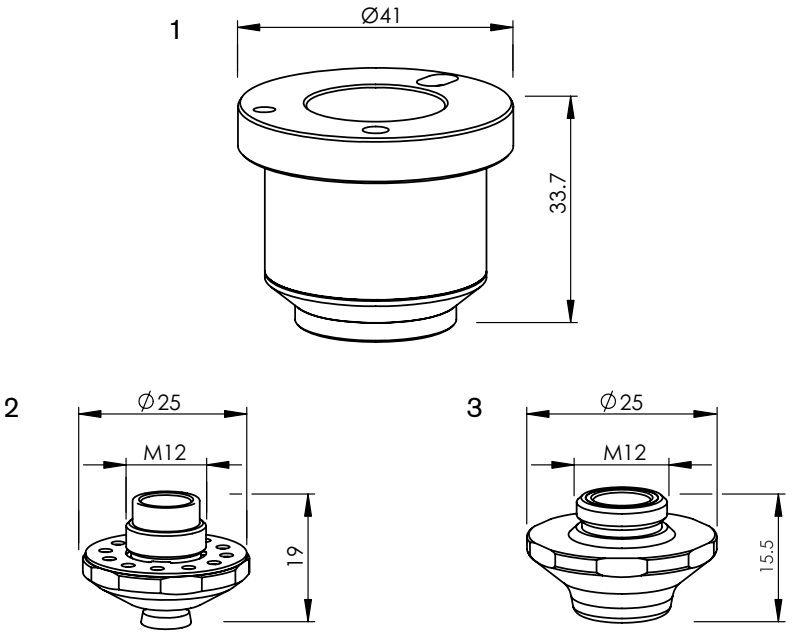
| Centricut part number | Reference number | Type | Material | Diameter | Focal length | Edge thickness |
|---|---|---|---|---|---|---|
| $CO_2$ lenses (continued) | | | | | | |
| MZ315-3480HA | 158039, Z50ZZ013480 HIGH ACCURACY | PLX | ZNSE | 2.0" | 5.0" | .380" |
| CN307-0676 | 870676, 61514, LPCZ-2.0-0.38-5.19-1141, PLLPZ0116 | PLX | ZNSE | 2.0" | 5.0"WD | .380" |
| MZ315-3470HA | 769062, Z50ZZ013470 HIGH ACCURACY | PLX | ZNSE | 2.0" | 7.5" | .380" |
| NT375-4494 | 634494, LPCZ-2.0-0.30-7.5-1133 | PLX | ZNSE | 2.0" | 7.5" | .300" |
| MB312-510 | W510, 61004, 892020, 110122, PLLPZ0138 | PLX | ZNSE | 2.0" | 7.5" | .310" |
| MZ315-0520A | 61405, 232771, Z50ZZ00520A, MLL00018, Z50ZZ005200, Z50ZZ013470, 81140186 | PLX | ZNSE | 2.0" | 7.5" | .380" |
| CN307-1603 | 61515, 781603, LPCZ-2.0-0.38-7.67-1143, PLLPZ0115 | PLX | ZNSE | 2.0" | 7.5" WD | .380" |
| TK374-3478 | 541344, 263478, Z50ZZ00530A, LPCZ-2.0-0.31-7.45-1137 | PLX | ZNSE | 2.0" | 8.75" | .310" |
| TK374-6670 | 236670, 61690, Z50ZZ00550A | PLX | ZNSE | 2.5" | 10.0" | .390" |
| TK374-1592 | 178937 | PLX | ZNSE | 2.5" | 11.25" | .310" |
| TK374-8593 | 828593 | PLX | ZNSE | 2.5" | 12.5" | .390" |
| TK374-3827 | 243827, Z50ZZ00540A, LPCZ-2.5-0.31-8.75-1145 | PLX | ZNSE | 2.5" | 8.75" | .310" |
| AM313-0221 | 81140221, 6067639 | PLX MTD | ZNSE | 1.5" | 3.75" | .300" |
| AM313-0306 | 81140306, 65024, 578662/M16-15-1C-P5.0, PLLPZ0133, 6874793 | PLX MTD | ZNSE | 1.5" | 5.0" | .300" |
| AM313-1216 | 578662/M20-15-1C-P5.0, 9001216A, 71501072, 7973109, 6360374 | PLX MTD | ZNSE | 1.5" | 5.0" | .300" |
| AM313-8662 | 578662/M21-15-1C-P5.0, 6060415 | PLX MTD | ZNSE | 1.5" | 5.0" | .300" |
| AM313-9830 | 65101, 578662, 6547252 | PLX MTD | ZNSE | 1.5" | 5.0" | .300" |
| AM313-1215 | 9001215A, 306068/M21-15-1C-P7.5, 7973110, 71501070, 6395647 | PLX MTD | ZNSE | 1.5" | 7.5" | .300" |
| AM313-9831 | 71369831, 65102, 6550214 | PLX MTD | ZNSE | 1.5" | 7.5" | .300" |
| AM313-10F1 | 680154-001, 71710061, 6021844 | PLX MTD | ZNSE | 2.0" | 10.0" | .380" |
| AM313-0307 | 65035, 81140307, 741363, 6068456 | PLX MTD | ZNSE | 2.0" | 5.0" | .380" |
| AM313-50F1 | 71710059, 741363M30-20-1C-P5.0, 6296946 | PLX MTD | ZNSE | 2.0" | 5.0" | .380" |
| AM313-0400 | 306068, 65025, 81140400, 6022704 | PLX MTD | ZNSE | 2.0" | 7.5" | .300" |
| AM313-0186 | 65038, 81140186, PLLPZ0156, 6068413 | PLX MTD | ZNSE | 2.0" | 7.5" | .380" |
| AM313-75F1 | 232771M31-20-1C-P7.5, 71710030, 6243925 | PLX MTD | ZNSE | 2.0" | 7.5" | .380" |
| BY314-7014MP5 | 460386, 4-07014 | MEN | ZNSE MP5 | 1.5" | 10.0" | .354" |
| BY314-0186MP5 | 4-00186, 528717, 60260LA | MEN | ZNSE MP5 | 1.5" | 5.0" | .236" |
| TR300-8114MP5 | 60696LA, 312503, 29100023, 88114, PLLPZ0125B | MEN | ZNSE MP5 | 1.5" | 5.0" | .290" |
| BY314-5094MP5 | 123397, 4-07475, 60615LA, LMZ1.5-0.354-5.0-2008 | MEN | ZNSE MP5 | 1.5" | 5.0" | .354" |
| BY314-0187MP5 | 714512, 60602LA, 4-00187 | MEN | ZNSE MP5 | 1.5" | 7.5" | .236" |
| TR300-7517MP5 | 60697LA, 97517, 474644, PLLPZ0126B | MEN | ZNSE MP5 | 1.5" | 7.5" | .290" |
| BY314-5095MP5 | 602033, 60616LA, 4-07476, LMZ1.5-0.354-7.5-2009, PLLPZ0130B, 62710 | MEN | ZNSE MP5 | 1.5" | 7.5" | .354" |
| BY314-8294MP5 | 996707, 10048294 | MEN | ZNSE MP5 | 1.5" | 9.0" | .354" |
| HW405-4913 | 114913 | MEN | ZNSE MP5 | 2.0" | 10.0" | .379" |
| HW405-5270 | 355270 | MEN | ZNSE MP5 | 2.0" | 5.0" | .378" |
| HW405-7143 | 527143, 467572, 60698LA, 291005-5, 308332, PLLMZ0025B | MEN | ZNSE MP5 | 2.0" | 7.5" | .379" |
| MZ315-0160MP5 | 60770LA, 857048, Z50MB000160 | PLX | ZNSE MP5 | 1.5" | 5.0" | .236" |
| MZ315-0400MP5 | 106106, PLLPZ0132B, 60905LA, Z50MB000400, 62670ULA | PLX | ZNSE MP5 | 1.5" | 5.0" | .300" |
| CN307-8085MP5 | 61001LA, 794914, 908085, | PLX | ZNSE MP5 | 1.5" | 5.0"WD | .280" |
| MB312-018MP5 | 383862 | PLX | ZNSE MP5 | 1.5" | 7.5" | .300" |
| CN307-9484MP5 | PLLPZ0052B | PLX | ZNSE MP5 | 1.5" | 7.5"WD | .315" |
| MB312-505MP5 | 61003LA, 922203, W505 | PLX | ZNSE MP5 | 2.0" | 5.0" | .310" |
| AM313-0307NMP5 | 81140307, 61019LA, 753010 | PLX | ZNSE MP5 | 2.0" | 5.0" | .380" |
| CN307-0211MP5 | 540211, 61019LA, 922377 | PLX | ZNSE MP5 | 2.0" | 5.0"WD | .380" |
| MB312-510MP5 | 61004LA, 635061, W510, | PLX | ZNSE MP5 | 2.0" | 7.5" | .310" |
| CN307-2376MP5 | 329011, 922376, 61515ULA, | PLX | ZNSE MP5 | 2.0" | 7.5" | .380" |
| MZ315-0520AMP5 | 392125, 61405LA, Z50ZZ000520A, PLLPZ0135B, 81140186 61405ULA | PLX | ZNSE MP5 | 2.0" | 7.5" | .380" |

| Centricut part number | Reference number | Type | Material | Diameter | Focal length | Edge thickness |
|---|---|---|---|---|---|---|
| $CO_2$ lenses (continued) | | | | | | |
| AM313-0306MP5 | 65024LA, 81140306, 106106, M16-15-1C-P5.0, 6936448 | PLX MTD | ZNSE MP5 | 1.5" | 5.0" | .300" |
| AM313-1216MP5 | 106106, M20-15-1C-P5.0, 6071896 | PLX MTD | ZNSE MP5 | 1.5" | 5.0" | .300" |
| AM313-9830MP5 | 71369830, 106106, 65101LA, 106106/M16-15-1C-P5.0-A2-NI-1A | PLX MTD | ZNSE MP5 | 1.5" | 5.0" | .300" |
| AM313-0400MP5 | 65025LA, 383862/M16-15-1C-P7.5-A2-NI-1A, 81140400, 383862 | PLX MTD | ZNSE MP5 | 1.5" | 7.5" | .300" |
| AM313-1215MP5 | M21-15-1C-P7.5, 383862, 6071853 | PLX MTD | ZNSE MP5 | 1.5" | 7.5" | .300" |
| AM313-9831MP5 | 65102LA, 71369831, 383862 | PLX MTD | ZNSE MP5 | 1.5" | 7.5" | .300" |
| AM313-0307MP5 | 81140307, M16-20-1C-P5.0, 753010, 65035LA, 753010M16-20-1C-P5.0 | PLX MTD | ZNSE MP5 | 2.0" | 5.0" | .380" |
| AM313-0186MP5 | 392125, 65038LA, M16-20-1C-P7.5, 81140186, 6816292 | PLX MTD | ZNSE MP5 | 2.0" | 7.5" | .380" |

# Accessories

| Centricut part number | Reference number | Description | Pkg qty |
|---|---|---|---|
| TR300-6452 | | Lens cleaning Tiffen paper (50 pcs) | 1 |
| TR300-1115 | | Lens cleaning pre-cut cotton (100 pcs) | 1 |
| TR300-1010 | | Dropper, lens cleaning fluid | 1 |
| TR300-1112 | | Optical cleaning fluid | 1 |
| TR300-0699 | 70675699 REVA | Lens cleaning swabs (25 pcs) | 1 |
| TR300-7991 | 27991 | Polyester wipes 4" x 4" (100 pcs) | 1 |
| TR301-0282 | | Injector | 1 |
| TR300-LSA | | Lens stress analyzer | 1 |
| TR300-255 | | Magnifying loop | 1 |
| TR300-271 | | Base, mirror maintenance | 1 |
| TR300-7388 | 787388 | Mirror polish .1UM 250ML | 1 |
| MZ335-115 | ALI115/M | MZ-Wire, Indium .8 mm x 125 mm 1.5" Lens | 1 |
| MZ335-120 | ALI120/M | MZ-Wire, Indium .8 mm x 160 mm 2.0" Lens | 1 |

# Replacement parts suitable for: Trumpf®*

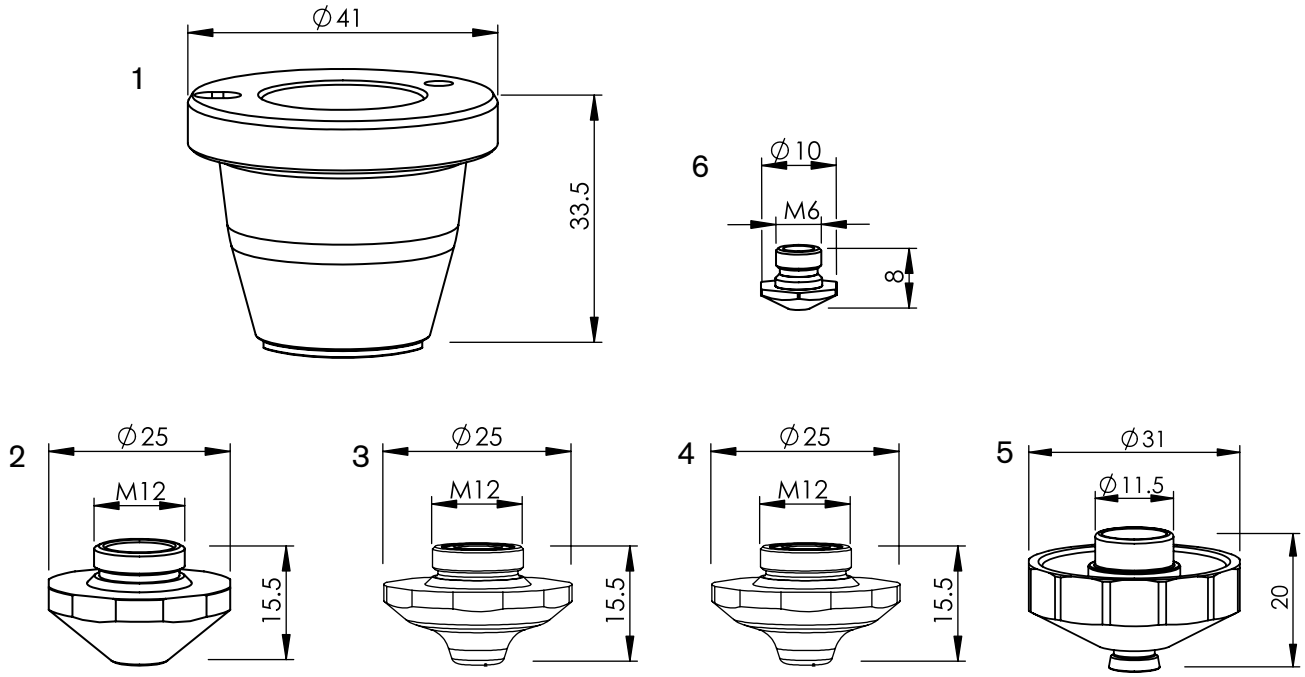



## Consumables

| | Centricut part number | Esse A part number | Reference number | Description | Pkg qty |
|---|---|---|---|---|---|
| 1 | TR407-6032 | AL497 | 1906032 | TR-Nozzle holder, ceramic | 1 |
| 2 | TR407-9940 | L1990 | 1879940 | TR-Nozzle EGL, 1.4 mm | 1 |
| | TR407-9951 | L1991 | 1879951 | TR-Nozzle EGL, 1.7 mm | 1 |
| | TR407-9952 | L1992 | 1879952 | TR-Nozzle EGL, 2.0 mm | 1 |
| | TR407-9953 | L1993 | 1879953 | TR-Nozzle EGL, 2.3 mm | 1 |
| 3 | TR407-1660 | L2305 | 2491660 | TR-Nozzle double CAU, 10.0 mm | 1 |

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# Replacement parts suitable for: Trumpf®*

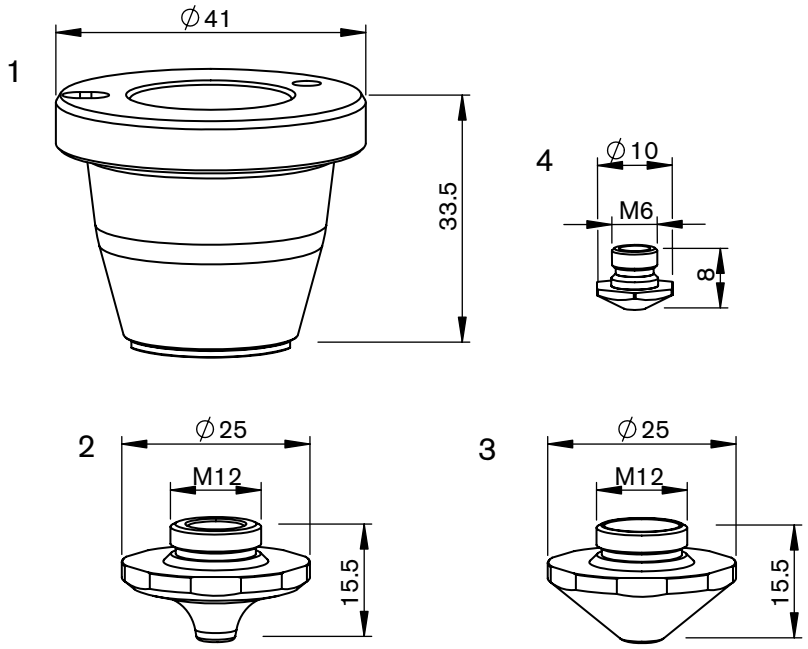



## Consumables

| | Centricut part number | Esse A part number | Reference number | Description | Pkg qty |
|---|---|---|---|---|---|
| 1 | TR407-5673 | AL410 | 1349171, 1755673 | TR-Nozzle holder, ceramic | 1 |
| 2 | TR407-4858X | L501270 | 1324858 | TR-Nozzle EAA, 0.8 mm (10 pk)* | 10 |
| | TR407-4860X | L501272 | 1324860 | TR-Nozzle EAA, 1.0 mm (10 pk)* | 10 |
| | TR407-4861X | L501273 | 1324861 | TR-Nozzle EAA, 1.2 mm (10 pk)* | 10 |
| | TR407-4863X | L501275 | 1324863 | TR-Nozzle EAA, 1.4 mm (10 pk)* | 10 |
| | TR407-4864X | L501276 | 1324864 | TR-Nozzle EAA, 1.7 mm (10 pk)* | 10 |
| | TR407-4858CPHX | L501270XH | | TR-Nozzle EAA, 0.8 mm HCP (10 pk)* | 10 |
| | TR407-4860CPHX | L501272XH | | TR-Nozzle EAA, 1.0 mm HCP (10 pk)* | 10 |
| | TR407-4861CPHX | L501273XH | | TR-Nozzle EAA, 1.2 mm HCP (10 pk)* | 10 |
| | TR407-4863CPHX | L501275XH | | TR-Nozzle EAA, 1.4 mm HCP (10 pk)* | 10 |
| | TR407-4864CPHX | L501276XH | | TR-Nozzle EAA, 1.7 mm HCP (10 pk)* | 10 |
| | TR407-4865X | L501277 | 1324865 | TR-Nozzle EAA, 2.0 mm (10 pk)* | 10 |
| | TR407-4866X | L501278 | 1324866 | TR-Nozzle EAA, 2.3 mm (10 pk)* | 10 |
| | TR407-4867X | L501279 | 1324867 | TR-Nozzle EAA, 2.7 mm (10 pk)* | 10 |
| | TR407-4865CPHX | L501277XH | | TR-Nozzle EAA, 2.0 mm HCP (10 pk)* | 10 |
| | TR407-4866CPHX | L501278XH | | TR-Nozzle EAA, 2.3 mm HCP (10 pk) | 10 |
| | TR407-4867CPHX | L501279XH | | TR-Nozzle EAA, 2.7 mm HCP (10 pk) | 10 |
| 3 | TR407-9462 | L2220 | 2059462 | TR-Nozzle double EAU, 2.5 mm | 1 |
| | TR407-0001 | L2221 | 2060001 | TR-Nozzle double EAU, 3.0 mm | 1 |
| | TR407-0004 | L2223 | 2060004 | TR-Nozzle double EAU, 4.0 mm | 1 |
| | TR407-0025 | L2227 | 2060025 | TR-Nozzle double EAU, 6.0 mm | 1 |
| | TR407-3595 | L2235 | 2253595 | TR-Nozzle double EAU, 10.0 mm | 1 |
| 4 | TR407-9549 | L2240 | 1579549 | TR-Nozzle double EAK, 2.5 mm | 1 |
| | TR407-9556 | L2241 | 1579556 | TR-Nozzle double EAK, 3.0 mm | 1 |
| | TR407-5747 | L2243 | 1835747 | TR-Nozzle double EAK, 4.0 mm | 1 |
| 5 | TR407-4018 | L1800 | 1774018 | TR-Nozzle EFL, 1.4 mm | 1 |
| | TR407-8745 | L1801 | 1838745 | TR-Nozzle EFL, 1.7 mm | 1 |
| | TR407-4020 | L1802 | 1774020 | TR-Nozzle EFL, 2.0 mm | 1 |
| | TR407-4092 | L1803 | 1774092 | TR-Nozzle EFL, 2.3 mm | 1 |
| 6 | TR407-9610 | L1700 | 1589610 | TR-Nozzle Blow off EBM, 2.0 mm | 1 |

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# Replacement parts suitable for: Trumpf®*



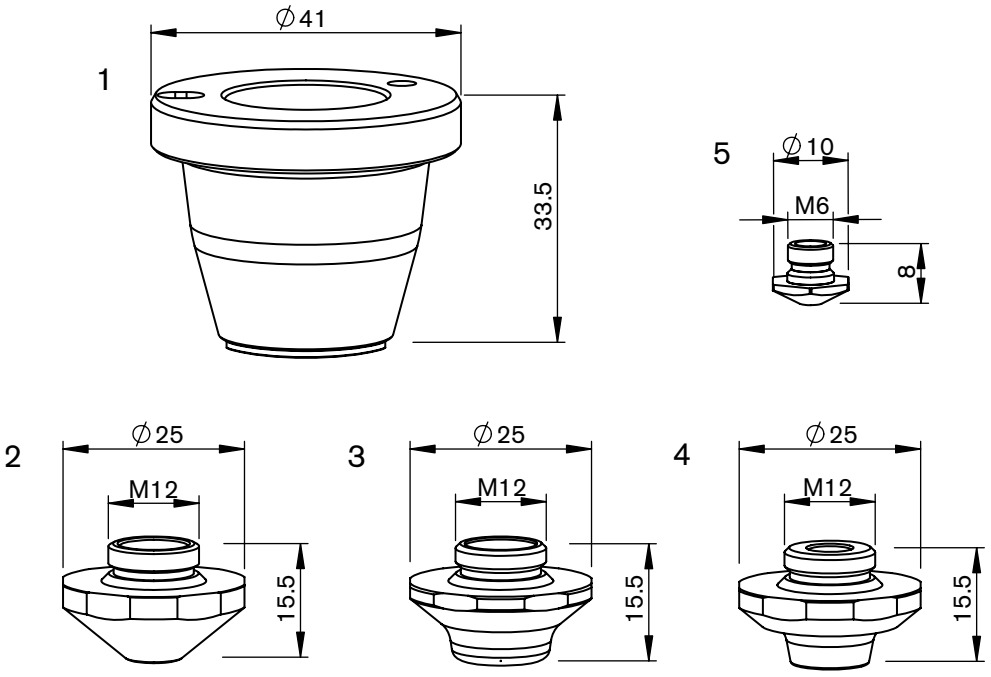

## Consumables

| | Centricut part number | Esse A part number | Reference number | Description | Pkg qty |
|---|---|---|---|---|---|
| 1 | TR407-5673 | AL410 | 1349171, 1755673 | TR-Nozzle holder, ceramic | 1 |
| 2 | TR426-3324X | L501500 | 1373324 | TR-Nozzle EAB, 0.8 mm (10 pk) | 10 |
| | TR426-3325X | L501501 | 1373325 | TR-Nozzle EAB, 1.0 mm (10 pk) | 10 |
| | TR426-3326X | L501502 | 1373326 | TR-Nozzle EAB, 1.2 mm (10 pk) | 10 |
| | TR426-3327X | L501503 | 1373327 | TR-Nozzle EAB, 1.4 mm (10 pk) | 10 |
| | TR426-3328X | L501504 | 1373328 | TR-Nozzle EAB, 1.7 mm (10 pk) | 10 |
| | TR426-3329X | L501505 | 1373329 | TR-Nozzle EAB, 2.0 mm (10 pk) | 10 |
| | TR426-3330X | L501506 | 1373330 | TR-Nozzle EAB, 2.3 mm (10 pk) | 10 |
| | TR426-3331X | L501507 | 1373331 | TR-Nozzle EAB, 2.7 mm (10 pk) | 10 |
| 3 | TR426-1309X | L501309 | | TR-Nozzle double, 1.0 mm (10 pk) | 10 |
| | TR426-1310X | L501310 | | TR-Nozzle double, 1.2 mm (10 pk)* | 10 |
| | TR426-1311X | L501311 | | TR-Nozzle double, 1.4 mm (10 pk)* | 10 |
| | TR426-1312X | L501312 | | TR-Nozzle double, 1.7 mm (10 pk) | 10 |
| | TR426-1313X | L501313 | | TR-Nozzle double, 2.0 mm (10 pk)* | 10 |
| | TR426-1314X | L501314 | | TR-Nozzle double, 2.3 mm (10 pk) | 10 |
| | TR426-1315X | L501315 | | TR-Nozzle double, 2.7 mm (10 pk) | 10 |
| 4 | TR407-9610 | L1700 | 1589610 | TR-Nozzle blow off EBM, 2.0 mm | 1 |

* Centricut parts available in single packs. To order single packs, remove the 'X' at the end of the part number (e.g. TR426-1308X would be TR426-1308).
For Esse A parts available in single packs. To order single packs, remove the '50' after the L in the part number (e.g. L501308 would be L1308).

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# Replacement parts suitable for: Trumpf®*

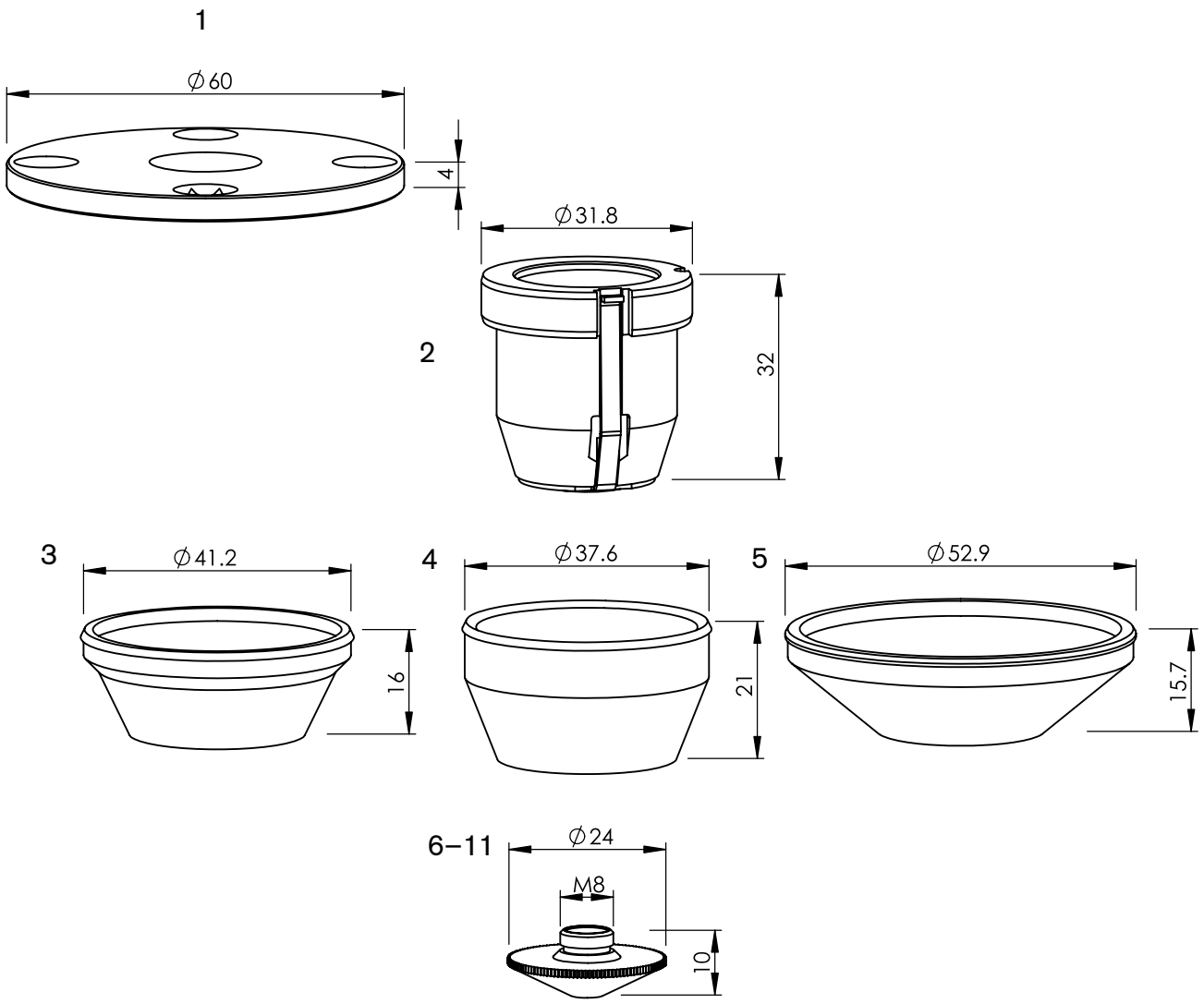



## Consumables

| | Centricut part number | Esse A part number | Reference number | Description | Pkg qty |
|---|---|---|---|---|---|
| 1 | TR407-5673 | AL410 | 1349171, 1755673 | TR-Nozzle holder, ceramic | 1 |
| 2 | TR407-7264 | L1260 | 1637264 | TR-Nozzle focusing ZAA-01 | 1 |
| 3 | TR407-9091 | L1885 | 1809091 | TR-Nozzle double EAQ, 6.0 mm | 1 |
| | TR407-9421 | L1886 | 1809421 | TR-Nozzle double EAQ, 7.5 mm | 1 |
| | TR407-6199 | L1887 | 1886199 | TR-Nozzle double EAQ, 9.5 mm | 1 |
| 4 | TR407-3046 | L1986 | 1633046 | TR-Nozzle EAC, 5.3 mm | 1 |
| 5 | TR407-9610 | L1700 | 1589610 | TR-Nozzle blow off EBM, 2.0 mm | 1 |

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# Replacement parts suitable for: Trumpf®*




## Consumables

| | Centricut part number | Esse A part number | Reference number | Description | Pkg qty |
|---|---|---|---|---|---|
| 1 | TR301-4485 | AL70 | 234485 | TR-Breakaway plate | 1 |
| 2 | TR301-0432 | AL108 | 254493, 260432 | TR-Nozzle holder, ceramic | 1 |
| 3 | TR301-4496 | AL36 | 254496 | TR-Cover, PTFE** | 1 |
| 4 | TR301-6153 | AL47 | 256153 | TR-Cover, PTFE** (white) | 1 |
| | TR301-6153T | AL347 | 955826 | TR-Cover, PTFE** (black) | 1 |
| 5 | TR301-5286 | AL41 | 225286 | TR-Cover, PTFE** | 1 |

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# Replacement parts suitable for: Trumpf®*

## Consumables

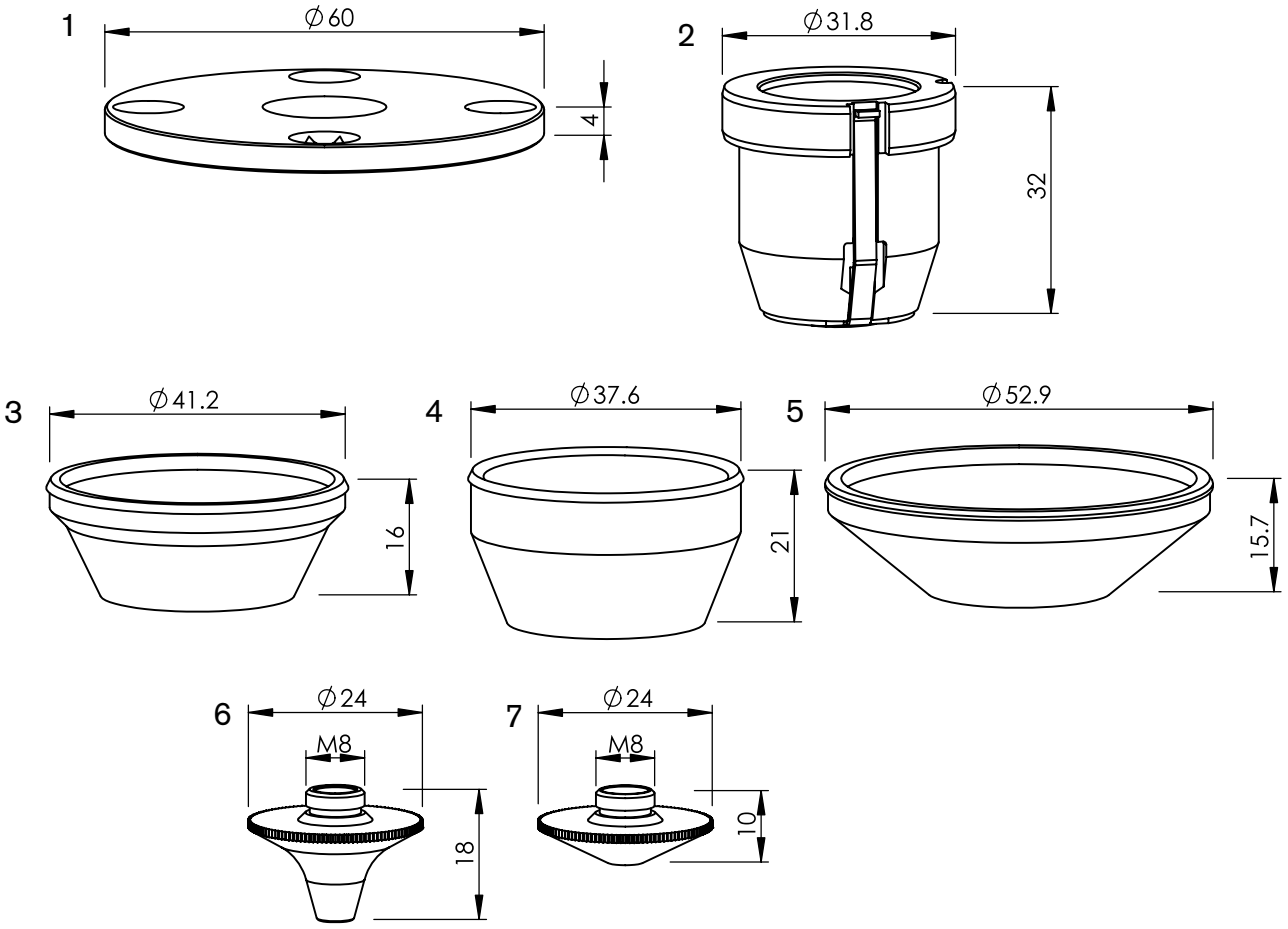
| | Centricut part number | Esse A part number | Reference number | Description | Pkg qty |
|---|---|---|---|---|---|
| 6 | TR301-4561X | L3018 | 0124561, 237499 | TR-Nozzle, 0.8 mm (10 pk)* | 10 |
| | TR301-4562X | L3019 | 0124562, 237498 | TR-Nozzle, 1.0 mm (10 pk)* | 10 |
| | TR301-6809X | L30361 | 0966809 | TR-Nozzle, 1.2 mm (10 pk)* | 10 |
| | TR301-0014X | L30795 | | TR-Nozzle, 1.4 mm (10 pk)* | 10 |
| | TR301-7500X | L3026 | 0237500 | TR-Nozzle, 1.5 mm (10 pk)* | 10 |
| | TR301-0017X | L30796 | | TR-Nozzle, 1.7 mm (10 pk)* | 10 |
| | TR301-7503X | L3024 | 0237503, 1253211 | TR-Nozzle, 2.0 mm (10 pk)* | 10 |
| | TR301-4564X | L30797 | 0124564 | TR-Nozzle, 2.3 mm (10 pk)* | 10 |
| | TR301-7504X | L3025 | 0237504 | TR-Nozzle, 3.0 mm (10 pk) | 10 |
| | TR301-0561CPX | L3018X | 0352280 | TR-Nozzle, 0.8 mm CP (10 pk)* | 10 |
| | TR301-0562CPX | L3019X | 0352281 | TR-Nozzle, 1.0 mm CP (10 pk)* | 10 |
| | TR301-0809CPX | L30361X | 0352282 | TR-Nozzle, 1.2 mm CP (10 pk)* | 10 |
| | TR301-0014CPX | L30795X | | TR-Nozzle, 1.4 mm CP (10 pk)* | 10 |
| | TR301-7500CPX | L3026X | 0352288 | TR-Nozzle, 1.5 mm CP (10 pk)* | 10 |
| | TR301-0017CPX | L30796X | | TR-Nozzle, 1.7 mm CP (10 pk)* | 10 |
| | TR301-7503CPX | L3024X | | TR-Nozzle, 2.0 mm CP (10 pk)* | 10 |
| | TR301-4564CPX | L30797X | 0124564 | TR-Nozzle, 2.3 mm CP (10 pk)* | 10 |
| 7 | TR301-7497X | L3020 | 0237497 | TR-Nozzle HD, 1.4 mm (10 pk)* | 10 |
| | TR301-1497CPX | L3020X | 0352283 | TR-Nozzle HD, 1.4 mm CP (10 pk)* | 10 |
| 8 | TR301-0497X | L30258 | | TR-Nozzle HD, 1.4 mm (10 pk)* | 10 |
| | TR301-7501X | L3021 | 0237501 | TR-Nozzle HD, 1.7 mm (10 pk)* | 10 |
| | TR301-3211X | L30168 | 0237502, 1253211 | TR-Nozzle HD, 2.0 mm (10 pk)* | 10 |
| | TR301-6933X | L3076 | 0126933 | TR-Nozzle HD, 2.3 mm (10 pk)* | 10 |
| | TR301-2742X | L30360 | 0942742 | TR-Nozzle HD, 2.7 mm (10 pk)* | 10 |
| | TR301-0497CPX | L30258X | | TR-Nozzle HD, 1.4 mm CP (10 pk)* | 10 |
| | TR301-0501CPX | L3021X | 0352284 | TR-Nozzle HD, 1.7 mm CP (10 pk)* | 10 |
| | TR301-1002CPX | L30168X | 0237502, 352287 | TR-Nozzle HD, 2.0 mm CP (10 pk)* | 10 |
| | TR301-0933CPX | L3076X | 0352285 | TR-Nozzle HD, 2.3 mm CP (10 pk)* | 10 |
| | TR301-0742CPX | L30360X | 0352286 | TR-Nozzle HD, 2.7 mm CP (10 pk)* | 10 |
| 9 | TR301-4561CPX | L3018XH | 0352280 | TR-Nozzle, 0.8 mm HCP (10 pk)* | 10 |
| | TR301-4562CPX | L3019XH | 0352281 | TR-Nozzle, 1.0 mm HCP (10 pk)* | 10 |
| | TR301-6809CPX | L30361XH | 0352282 | TR-Nozzle, 1.2 mm HCP (10 pk)* | 10 |
| 10 | TR301-7497CPX | L3020XH | 0352283 | TR-Nozzle HD, 1.4 mm HCP (10 pk)* | 10 |
| 11 | TR301-0014HCPX | L30258XH | | TR-Nozzle HD, 1.4 mm HCP (10 pk) | 10 |
| | TR301-7501CPX | L3021XH | 0352284 | TR-Nozzle HD, 1.7 mm HCP (10 pk)* | 10 |
| | TR301-0002CPX | L30168XH | 0237502, 1253212 | TR-Nozzle HD, 2.0 mm HCP (10 pk)* | 10 |
| | TR301-6933CPX | L3076XH | 0352285 | TR-Nozzle HD, 2.3 mm HCP (10 pk)* | 10 |
| | TR301-2742CPX | L30360XH | 0352286 | TR-Nozzle HD, 2.7 mm HCP (10 pk)* | 10 |

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For Esse A parts available in single packs. To order single packs, remove the '30' after the L in the part number (e.g. L30640 would be L640).

** PolyTetraFluoroEthylene is a fluorocarbon-based polymer and is commonly abbreviated PTFE. The Teflon® brand of PTFE is manufactured only by DuPont and is not sold by Hypertherm. Hypertherm purchases other brands of PTFE from various high quality manufacturers.

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# Replacement parts suitable for: Trumpf®*




## Consumables

| | Centricut part number | Esse A part number | Reference number | Description | Pkg qty |
|---|---|---|---|---|---|
| 1 | TR301-4485 | AL70 | 234485 | TR-Breakaway plate | 1 |
| 2 | TR301-0432 | AL108 | 254493, 260432 | TR-Nozzle holder, ceramic | 1 |
| 3 | TR301-4496 | AL36 | 254496 | TR-Cover, PTFE** | 1 |
| 4 | TR301-6153 | AL47 | 256153 | TR-Cover, PTFE** (white) | 1 |
| | TR301-6153T | AL347 | 955826 | TR-Cover, PTFE** (black) | 1 |
| 5 | TR301-5286 | AL41 | 225286 | TR-Cover, PTFE** | 1 |
| 6 | TR301-7773 | L1550 | 1277773 | TR-Nozzle, 0.8 mm | 1 |
| | TR301-7771 | L1551 | 1277771 | TR-Nozzle, 1.0 mm | 1 |
| | TR301-7774 | L1552 | 1277774 | TR-Nozzle, 1.2 mm | 1 |
| | TR301-7776 | L1553 | 1277776 | TR-Nozzle, 1.4 mm | 1 |
| | TR301-7779 | L1554 | 1277779 | TR-Nozzle, 1.7 mm | 1 |

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# Replacement parts suitable for: Trumpf®*

## Consumables

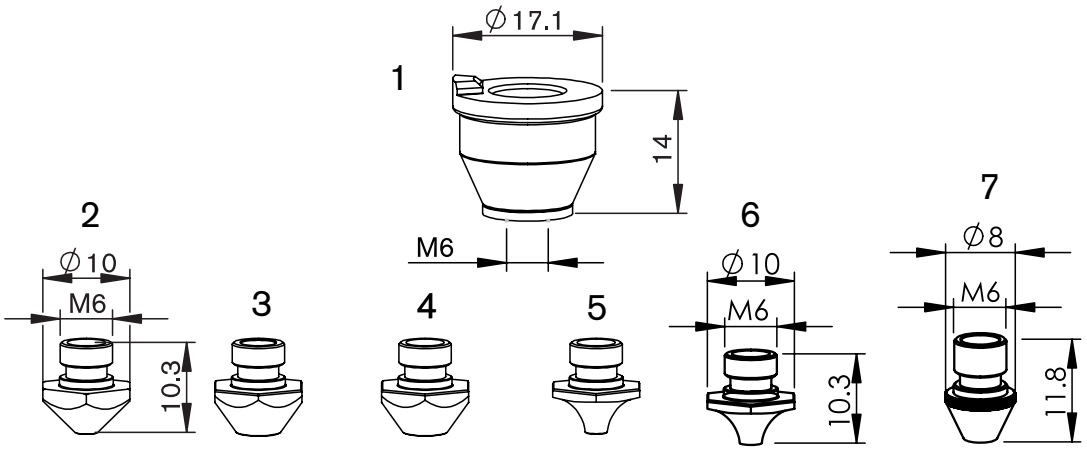
| | Centricut part number | Esse A part number | Reference number | Description | Pkg qty |
|---|---|---|---|---|---|
| 7 | TR355-0001X | L30641 | | TR-Nozzle double, 1.0 mm (10 pk) | 10 |
| | TR355-0006X | L30648 | | TR-Nozzle double, 1.2 mm (10 pk)* | 10 |
| | TR355-0002X | L30642 | | TR-Nozzle double, 1.4 mm (10 pk)* | 10 |
| | TR355-0003X | L30643 | | TR-Nozzle double, 1.7 mm (10 pk)* | 10 |
| | TR355-0007X | L30644 | | TR-Nozzle double, 2.0 mm (10 pk)* | 10 |
| | TR355-0004X | L30645 | | TR-Nozzle double, 2.3 mm (10 pk)* | 10 |
| | TR355-0008X | L30646 | | TR-Nozzle double, 2.7 mm (10 pk) | 10 |
| | TR355-0009X | L30647 | | TR-Nozzle double, 3.0 mm (10 pk) | 10 |

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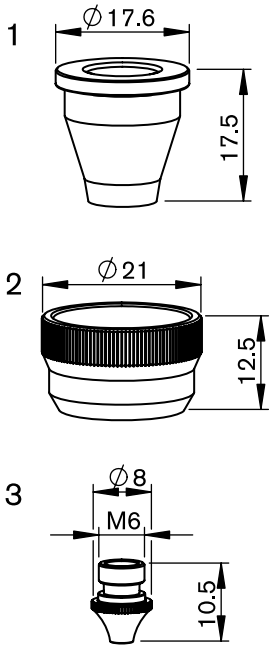

## Consumables

| | Centricut part number | Esse A part number | Reference number | Description | Pkg qty |
|---|---|---|---|---|---|
| 1 | TR302-2406 Recommended | AL653 | 280408, 092405, P0494-752-00001, 6930300016 | TR-Nozzle holder KT M1.5" KN | 1 |
| | TR302-2405 | AL53 | 280408, 092405, P0494-752-00001, 6930300016 | TR-Nozzle holder KT M1.5" KN OEM | 1 |
| 2 | TR302-6939X | L40211 | 226939 | TR-Nozzle, 1.0 mm (10 pk)* | 10 |
| | TR302-6940X | L40215 | 226940 | TR-Nozzle HD, 1.4 mm (10 pk)* | 10 |
| | TR302-7144X | L40216 | 227144 | TR-Nozzle HD, 1.7 mm (10 pk)* | 10 |
| 3 | TR302-7364X | | 237364 | TR-Nozzle shower, 1.0 mm (10 pk)* | 10 |
| 4 | TR302-4230X | L401150 | 135420, 1354230 | TR-Nozzle EBD, 0.8 mm (10 pk)* | 10 |
| | TR302-2334X | L40255 | 212334 | TR-Nozzle EBD, 1.0 mm (10 pk)* | 10 |
| | TR302-0008CPX | L401150X | | TR-Nozzle EBD, 0.8 mm CP (10 pk) | 10 |
| | TR302-2334CPX | L40255X | | TR-Nozzle EBD, 1.0 mm CP (10 pk) | 10 |
| | TR302-0009X | L401151 | | TR-Nozzle EBD HD, 0.8 mm (10 pk) | 10 |
| | TR302-0004X | L40270 | 1736458 | TR-Nozzle EBD HD, 1.0 mm (10 pk)* | 10 |
| | TR302-6199X | L40256 | 216199 | TR-Nozzle EBD HD, 1.4 mm (10 pk)* | 10 |
| | TR302-5213X | L40257 | 225213 | TR-Nozzle EBD HD, 1.7 mm (10 pk)* | 10 |
| | TR302-7009X | L401147 | 1487009, 1384753 | TR-Nozzle EBD HD, 2.0 mm (10 pk)* | 10 |
| | TR302-6156X | L40277 | 126156 | TR-Nozzle EBD HD, 2.3 mm (10 pk)* | 10 |
| | TR302-6125X | L401149 | | TR-Nozzle EBD HD, 2.5 mm (10 pk) | 10 |
| | TR302-0027X | L401152 | | TR-Nozzle EBD HD, 2.7 mm (10 pk) | 10 |
| | TR302-6198X | L401154 | 1479581 | TR-Nozzle EBD HD, 1.2 mm (10 pk)* | 10 |
| | TR302-6199CPX | L40256X | | TR-Nozzle EBD HD, 1.4 mm CP (10 pk) | 10 |
| | TR302-5213CPX | L40257X | | TR-Nozzle EBD HD, 1.7 mm CP (10 pk)* | 10 |
| | TR302-6156CPX | L40277X | | TR-Nozzle EBD HD, 2.3 mm CP (10 pk) | 10 |
| 5 | TR302-5318X | L40628 | | TR-Nozzle HD, 1.4 mm (10 pk)* | 10 |
| | TR302-0017X | L40629 | | TR-Nozzle HD, 1.7 mm (10 pk)* | 10 |
| 6 | TR302-0012X | L401153 | | TR-Nozzle HD, 1.2 mm (10 pk) | 10 |
| | TR302-0014X | L40268 | 135318 | TR-Nozzle HD, 1.4 mm (10 pk)* | 10 |
| | TR302-6157X | L40269 | 126157 | TR-Nozzle HD, 1.7 mm (10 pk)* | 10 |
| 7 | TR302-1409X | L402122 | 2241409 | TR-Nozzle EBC, 2.0 mm (10 pk) | 10 |
| | TR302-5524X | L402123 | 2085524 | TR-Nozzle EBC, 2.6 mm (10 pk) | 10 |
| | TR302-1406X | L402121 | 2241406 | TR-Nozzle EBC X31, 1.6 mm (10 pk) | 10 |
| | TR302-1407X | L402119 | 2241407 | TR-Nozzle EBC X12, 1.8 mm (10 pk) | 10 |
| | TR302-1524X | L402124 | 2241524 | TR-Nozzle EBC X35, 2.6 mm (10 pk) | 10 |

* Centricut parts available in single packs. To order single packs, remove the 'X' at the end of the part number (e.g. TR302-4230X would be TR302-4230).
For Esse A parts available in single packs. To order single packs, remove the '40' after the L in the part number (e.g. L401150 would be L1150).

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# Replacement parts suitable for: Trumpf®*




## Consumables

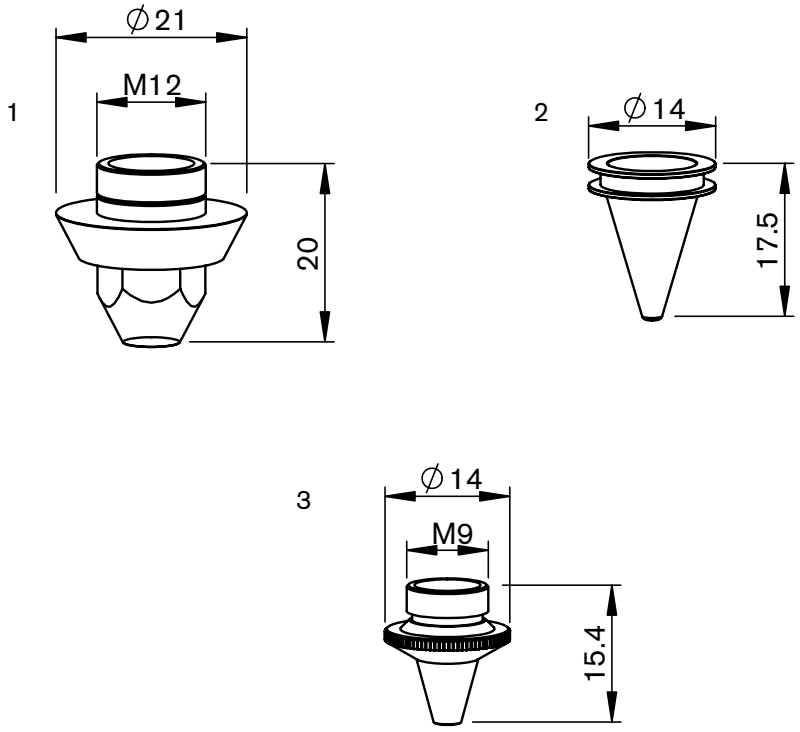
| | Centricut part number | Esse A part number | Reference number | Description | Pkg qty |
|---|---|---|---|---|---|
| | TR302-0354 (not shown) | AL389 | 960354 | TR-Insulating, PTFE** | 1 |
| 1 | TR302-6678 Recommended | AL212 | 936678, 913966/00-WO, 2509767 | TR-Nozzle holder, ceramic | 1 |
| | TR302-6678OEM | | 936678, 913966/00-WO | TR-Nozzle holder, ceramic OEM | 1 |
| 2 | TR352-3965 | AL254 | 913965 | TR-Retainer nut | 1 |
| 3 | TR352-3799X | L40500 | 913799 | TR-Nozzle EBG HD, 0.8 mm (10 pk)* | 10 |
| | TR352-3800X | L40501 | 913800 | TR-Nozzle EBG HD, 1.0 mm (10 pk)* | 10 |
| | TR352-7034X | L40498 | 1487034 | TR-Nozzle EBG HD, 1.2 mm (10 pk)* | 10 |
| | TR352-3801X | L40502 | 913801 | TR-Nozzle EBG HD, 1.4 mm (10 pk)* | 10 |
| | TR352-7988X | L40503 | 937988 | TR-Nozzle HD, 1.7 mm (10 pk)* | 10 |
| | TR352-7991X | L40499 | | TR-Nozzle HD, 1.75 mm (10 pk)* | 10 |
| | TR352-7990X | L40508 | 1487036 | TR-Nozzle HD, 2.0 mm (10 pk)* | 10 |
| | TR352-7989X | L40504 | 937989 | TR-Nozzle EBF HD, 2.3 mm (10 pk)* | 10 |
| | TR352-3800CPX | L40501X | | TR-Nozzle EBG HD, 1.0 mm CP (10 pk)* | 10 |
| | TR352-3801CPX | L40502X | | TR-Nozzle EBG HD, 1.4 mm CP (10 pk)* | 10 |
| | TR352-7988CPX | L40503X | | TR-Nozzle HD, 1.7 mm CP (10 pk)* | 10 |
| | TR352-7990CPX | L40508X | | TR-Nozzle HD, 2.0 mm CP (10 pk)* | 10 |
| | TR352-7989CPX | L40504X | 937989 | TR-Nozzle EBF HD, 2.3 mm CP (10 pk)* | 10 |

* Centricut parts available in single packs. To order single packs, remove the 'X' at the end of the part number (e.g. TR302-4230X would be TR302-4230).
For Esse A parts available in single packs. To order single packs, remove the '40' after the L in the part number (e.g. L401150 would be L1150).

** PolyTetraFluoroEthylene is a fluorocarbon-based polymer and is commonly abbreviated PTFE. The Teflon® brand of PTFE is manufactured only by DuPont and is not sold by Hypertherm. Hypertherm purchases other brands of PTFE from various high quality manufacturers.

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# Replacement parts suitable for: Trumpf®*



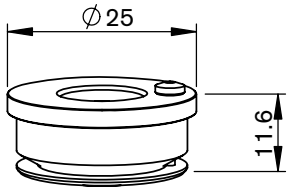

## Consumables

| | Centricut part number | Esse A part number | Reference number | Description | Pkg qty |
|---|---|---|---|---|---|
| 1 | TR352-2530CP | L1010X | 932530 | TR-Nozzle, 4.5 mm CP | 1 |
| 2 | TR414-0012 | L505 | 12-11-09-17/00 | TR-Nozzle YAG w/o-ring, 1.2 mm | 1 |
| 3 | PT344-1813X | L30405 | 281813, P0589-424-00008 | PT-Nozzle, 0.8 mm (10 pk)* | 10 |
| | PT344-1789X | L30406 | 281789, P0589-426-00010 | PT-Nozzle, 1.0 mm (10 pk)* | 10 |
| | PT344-1561X | L30404 | 281561, 778550, P0589-425-00012 | PT-Nozzle, 1.2 mm (10 pk)* | 10 |
| | PT344-1499X | L30407 | 281814, 149957 | PT-Nozzle, 1.5 mm (10 pk)* | 10 |
| | PT344-0020X | L30408 | P0589-428-00020 | PT-Nozzle, 2.0 mm (10 pk) | 10 |

* Centricut parts available in single packs.To order single packs, remove the 'X' at the end of the part number (e.g. TR355-0005X would be TR355-0005).
For Esse A parts available in single packs. To order single packs, remove the '30' after the L in the part number (e.g. L30640 would be L640).

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# Replacement parts suitable for: Trumpf®*



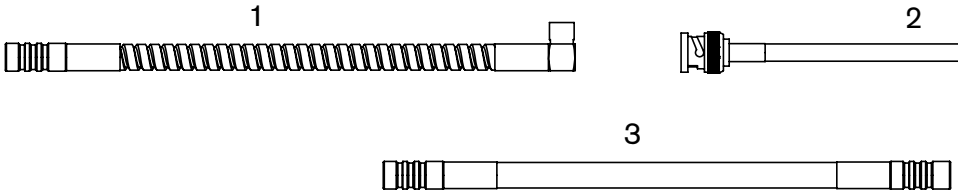

## Consumables

| | Centricut part number | Esse A part number | Reference number | Description | Pkg qty |
|---|---|---|---|---|---|
| 1 | TR301-8809 | AL38 | 258809, 243839, 247894 | TR-Nozzle holder, ceramic | 1 |

* Centricut parts available in single packs. To order single packs, remove the 'X' at the end of the part number (e.g. TR355-0005X would be TR355-0005).
For Esse A parts available in single packs. To order single packs, remove the '30' after the L in the part number (e.g. L30640 would be L640).

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# Replacement parts suitable for: Trumpf®*



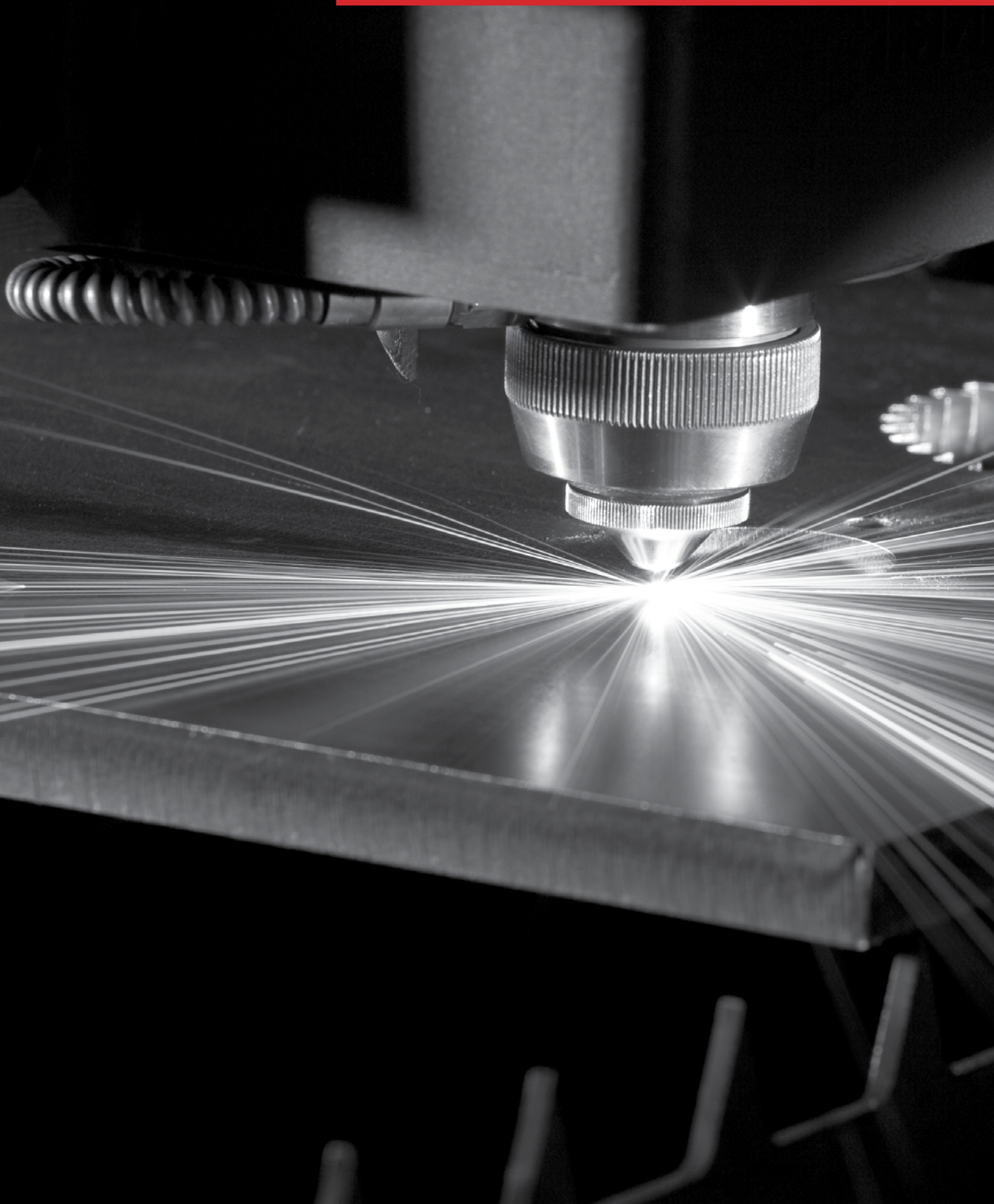

## Consumables

| | Centricut part number | Esse A part number | Reference number | Description | Pkg qty |
|---|---|---|---|---|---|
| 1 | TR301-9983 | AL642 | 342474, 359983 | TR-Sensor cable, 190 mm (7.5") armored | 1 |
| 2 | TR301-7833 | AL641 | 227833 | TR-Sensor cable, 432 mm (17") | 1 |
| 3 | TR301-0930 | AL640 | 280930 | TR-Sensor cable, 152 mm (6") armored | 1 |
| 4 | TR301-6152 | CP10 | 146152 | TR-WATER FILTER 30x68x250 146152 | 1 |

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Centricut®
LASER CONSUMABLES

# Resources



# Sensor cones



## Centricut sensor cones provide substantial cost savings without sacrificing performance or quality

- Available for Amada, Mazak, Mitsubishi and Precitec
- Delivers the same OEM performance at a lower cost
- Unmatched performance and reliability
- Engineered and manufactured to Hypertherm's precise quality standards
- Backed by our one-year warranty and 100% satisfaction guarantee

| Centricut part number | Esse A part number | OEM | Reference number | Description |
|---|---|---|---|---|
| AM343-0091 | AL600 | Amada | 71360091 | AM-Sensor cone, HS95 mini |
| AM343-1621* | AL601 | Amada | 71341621 | AM-Sensor cone, HS95 |
| AM343-9107 | AL603 | Amada | ECO cone | AM-Sensor cone, ECO |
| AM343-1690 | AL602 | Amada | 71341690 | AM-Sensor cone, HS98 |
| AM343-L3015C | AL550 | Amada | 71374509 | PT-Sensor cone, LC3015 |
| AM343-2443 | | Amada | 7172443, 771041 | AM-Sensor cone, HPL Blue |
| AM343-4233B* | AL551 | Amada | 71564233 | AM-Sensor cone, HPL Black |
| AM343-4233G* | AL552 | Amada | 71564233 | AM-Sensor cone, HPL Gold |
| PT347-3323 | AL611 | Mazak | HNP | PT-Sensor cone, HNP |
| MZ335-HNPS* | AL605 | Mazak | HNPS | MZ-Sensor cone, HNP short version |
| PT347-0007 | | Mazak | 56743300500 | PT-Sensor cone, HNZ (Mazak) |
| PT347-0011* | AL607 | Mitsubishi | P0354-110-00002 | PT-Sensor cone, HNZ (Mitsubishi) |
| MB334-W429A | AL604 | Mitsubishi | P0461-270-00001 | MB-Sensor cone, W429A |
| PT347-0238* | AL608 | Precitec | BQ930D238G01 | PT-Sensor cone, HNZ SMA |
| PT347-8001 | AL612 | Precitec | P0361-203-00001 | PT-Sensor cone, 2.5Z/J |
| PT347-0522* | AL609 | Precitec | P0599-520-00002 | PT-Sensor cone, LRC |
| PT347-1145 | AL610 | Precitec | P0380-140-0002, P0380-130-00001, 281145 | PT-Sensor cone, DZ |

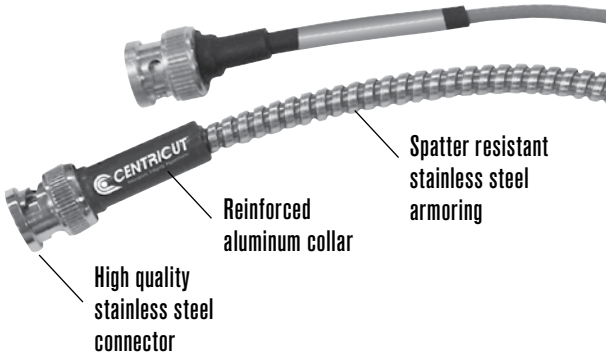
*Sensor cone repair service is available for most sensor cones in North America and select international regions. For more information contact Ctlaser@Hypertherm.com.

# Armored sensor cables

## Centricut armored sensor cables outlast standard OEM cables

- Available for all major brands
- Robust design with extreme temperature rating (900–1200°)
- Longer life reduces downtime and production loss
- Spatter resistant stainless steel armoring
- Reinforced collars and high-quality connector






Armored sensor cables

| Centricut part number | Esse A part number | OEM | Reference number | Description |
|---|---|---|---|---|
| AM308-8965 | AL260 | Amada | 71398965 | AM-Sensor cable, 305 mm (12") |
| AM308-8965A | AL613 | Amada | 71398965 | AM-Sensor cable, 305 mm (12") armored |
| AM313-1901 | AL200 | Amada | 71341630 | AM-Sensor cable HS-5, 305 mm (12") |
| AM313-1901A | | Amada | 71341630 | AM-Sensor cable HS-5, 305 mm (12") armored |
| AM313-8292 | AL615 | Amada | 71398292 | AM-Sensor cable dual shield, 7 m (275.6") |
| AM313-9851A | | Amada | 71369851 | AM-Sensor cable, 203 mm (8") armored |
| CN306-0654A | AL616 | Cincinnati | 909654, 922686 | CN-Sensor cable, 114 mm (4.5") armored |
| CN306-0951A | AL617 | Cincinnati | 842951 | CN-Sensor cable, 140 mm (5.5") armored |
| CN306-2951 | AL618 | Cincinnati | 842951, PLTTW0015 | CN-Sensor cable, 140 mm (5.5") |
| CN306-9654 | AL619 | Cincinnati | 909654, 922686, PLTTW0002 | CN-Sensor cable, 114 mm (4.5") |
| MZ335-0111A | AL620 | Mazak | 4674330111 | MZ-Sensor cable, 280 mm (11") armored |
| MZ335-0181A | AL621 | Mazak | 46743300181 | MZ-Sensor cable, 317.5 mm (12.5") armored |
| MZ335-1330A | AL622 | Mazak | 46683301330 | MZ-Sensor cable, 305 mm (12") armored |
| MZ335-1980A | AL643 | Mazak | 46683301980 | MZ-Sensor cable, 280 mm (11") armored |
| MZ335-5320 | | Mazak | 6143355320 | MZ-Sensor cable, 61.5 mm (2.4") armored |
| MZ335-630A | AL623 | Mazak | 00BSBA630MNC | MZ-Sensor cable, 630 mm (25") armored |
| MZ335-8290 | AL368 | Mazak | 46143308290 | MZ-Sensor cable, 75 mm (3") |
| NT426-1682 | AL624 | NTC | 4R029911-001, J482D | NT-Sensor cable, 216 mm (8.5") |
| NT426-4991 | AL625 | NTC | 3-0104991 | NT-Sensor cable 0-0BNC/MCX, 482 mm (19") |
| NT426-7492 | AL626 | NTC | 3-0117492 | NT-Sensor cable 90BNC/90BNC, 482 mm (19") |
| NT426-8677 | AL627 | NTC | 4R028677-001 | NT-Sensor cable, 508 mm (20") armored |
| PR361-3150 | AL628 | Prima | 820.63.150 | PR-Sensor cable, 150 mm (5.9") |
| PR361-3151 | AL629 | Prima | 820.63.150 | PR -Sensor cable, 150 mm (6") high profile |
| PR361-3160 | AL560 | Prima | 555.63.150 | PR-Sensor cable, 210 mm (8 17/64") |
| PT347-0101A | AL633 | Precitec | P0360-100-00500 | PT-Sensor cable, 500 mm (20") armored |
| PT347-0181 | AL358 | Precitec | 46743300181 | PT-Sensor cable, 305 mm (12") armored |
| PT347-0300A | AL635 | Precitec | P0492-014-00300 | PT-Sensor cable KE, 300 mm (11.8") armored |
| PT347-0450 | | Precitec | P0497-002-00450 | PT-Sensor cable, 450 mm (17.7") |
| PT347-KS13 | AL639 | Precitec/ Gunkyo | 00BMTKA-A-HS500mm | PT-Sensor cable, 390 mm (15.5") armored |
| PT347-1250 | AL637 | Precitec | D5001-040-00250 | PT-Sensor cable, 250 mm (9.8") armored |
| TR301-0930 | AL640 | Trumpf | 280930 | TR-Sensor cable, 152 mm (6") armored |
| TR301-7833 | AL641 | Trumpf | 227833 | TR-Sensor cable, 432 mm (17") |
| TR301-9983 | AL642 | Trumpf | 359983, 342474 | TR-Sensor cable, 190 mm (7.5") armored |

# Lens cleaning tips




## Centricut supplies suitable for all OEM $CO_2$ and fiber laser lenses

- Lens maintenance base is designed to secure a wide range of optics sizes for the cleaning process
- Centricut optical cleaning fluid is a safe, economical alternative to traditional high-purity and reagent-grade solvents
- Cleaning materials suited for all lens cleaning needs; lens paper, polyester swabs and polyester wipes

### Lens paper

Recommended for the routine maintenance cleaning of flat lenses.

### Polyester swabs

Recommended for cleaning curved lenses and where a more aggressive cleaning is required (interchangeable with polyester wipes).

### Polyester wipes

Recommended for cleaning $CO_2$ and fiber lenses and windows (interchangeable with polyester swabs and lens paper).

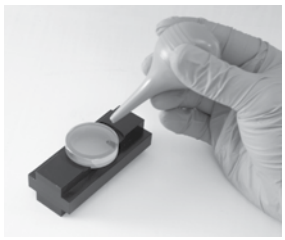
| Product description | Part number | Quantity per order |
|---|---|---|
| Optical cleaning fluid (3 oz.) | TR300-1112 | 1 |
| Lens cleaning swab | TR300-0699 | 25 |
| Lens cleaning paper, Tiffen | TR300-6452 | 50 |
| Polyester wipes 4" x 4" | TR300-7991 | 100 |
| Base, lens maintenance | TR300-271 | 1 |

## Lens paper

Recommended for the routine maintenance cleaning of flat lenses.

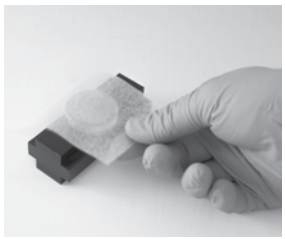
### You will need:

- Lens maintenance base (lens holder)
- Optical cleaning fluid
- Air bulb
- Lint-free lens paper
- Latex or rubber gloves



### To get started

Using rubber gloves, place the lens in the lens holder and remove all loose contaminants with an air bulb. When contaminants are no longer visible, begin the cleaning process.



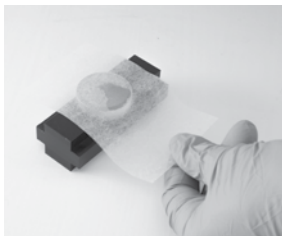
### Step 1

Place lens paper over the optic, covering it completely.



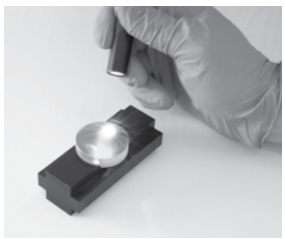
### Step 2

Apply a couple drops of lens cleaning fluid to the lens paper (far side of the lens).



### Step 3

Slowly pull the lens paper across the lens so the cleaning fluid comes in contact with the entire lens surface. Finish pulling the paper across so all of the fluid has dried from the lens.



### Step 4

Inspect the surface of the lens for dust and cleaning residue using a flashlight. Examine the lens from different angles. Repeat the process on the other side of the lens.

### Final step:

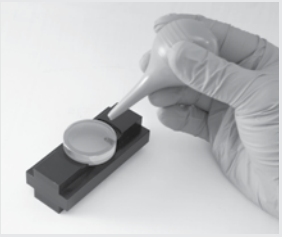
Place the cleaned lens in the machine quickly to avoid contamination from airborne particles. If spots, pits, or scratches are still noticeable, the lens may need to be replaced.

## Polyester swabs

Recommended for cleaning curved lenses and where more aggressive cleaning is required. Interchangeable with polyester wipes.

### You will need:

- Lens maintenance base (lens holder)
- Optical cleaning fluid
- Air bulb
- Polyester swabs
- Latex or rubber gloves



### To get started

Using rubber gloves, place the lens in the lens holder and remove all loose contaminants with an air bulb. When contaminants are no longer visible, begin the cleaning process.



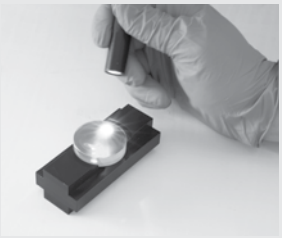
### Step 1

Place a few drops of the optical cleaning fluid onto the swab.



### Step 2

Move the larger dirt particles and then finer contaminants to the edge of the lens using the swab. Do not rest the swab on the lens or on the work table. Do not reuse swabs.



### Step 3

Inspect the surface of the lens for dust and cleaning residue using a flashlight. Examine the lens from different angles. Repeat the process on the other side of the lens.

### Final step:

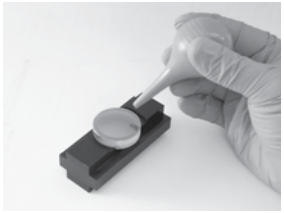
Place the cleaned lens in the machine quickly to avoid contamination from airborne particles. If spots, pits, or scratches are still noticeable, the lens may need to be replaced.

## Polyester wipes

Recommended for cleaning $CO_2$ and fiber lenses and windows. Interchangeable with polyester swabs and lens paper.

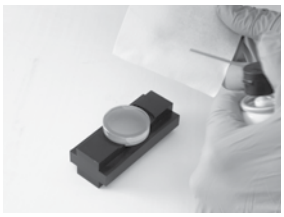
### You will need:

- Lens maintenance base (lens holder)
- Optical cleaning fluid
- Air bulb
- Polyester wipes
- Latex or rubber gloves



### To get started

Using rubber gloves, place the lens in the lens holder and remove all loose contaminants with an air bulb. When contaminants are no longer visible, begin the cleaning process.



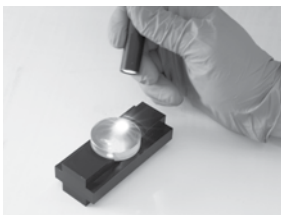
### Step 1

Place a few drops of the optical cleaning fluid onto the polyester wipe



### Step 2

Place the wipe with the wet side down on the lens and slide it across the lens, applying light pressure to the top of the wipe. Avoid contamination to the wipe and do not reuse wipes.



### Step 3

Inspect the surface of the lens for dust and cleaning residue using a flashlight. Examine the lens from different angles. Repeat the process on the other side of the lens.

### Final step:

Place the cleaned lens in the machine quickly to avoid contamination from airborne particles. If spots, pits, or scratches are still noticeable, the lens may need to be replaced.

# Steps to help optimize cut quality.

Striation marks, angularity and dross tell the story.

Optimizing $CO_2$ and fiber lasers to achieve maximum cut quality is a very important step in the overall cutting process. The critical points that produce good cuts are the width of the kerf (the material that is lost during the cut), oxidation and roughness of the cut surface, the geometry of the cut parts and the allowable tolerances. Some factors to be considered are the cut speed or 'feed rate', beam focus, gas pressure, standoff and nozzle size/ type.

## Factory cut chart settings

The following samples show 12 mm, 6 mm and 3.,2 mm (1/2", 1/4" and 10 ga.) mild steel, cut with $O_2$ on a 2 kW fiber laser with one variable changed to show how cut quality is affected. The adjustments will be similar for all $CO_2$ and fiber laser, cutting mild steel with $O_2$.

## Is the kerf too narrow?

When the kerf is too narrow the cut will have a very smooth edge on the top, a lack of oxidation on the bottom and/or heavy dross.

### Probable causes:

- Focus is too low
- Feed rate is too fast
- Gas pressure is too low
- Nozzle size is too small
- Standoff is too low

## Is the kerf too wide?

When the kerf is too wide the cut will have a rougher edge, more self burning in the corners of the part, more angularity on the cut edge and occasionally, dross.

### Probable causes:

- Focus is too high
- Feed rate is too slow
- Gas pressure is too high
- Nozzle size is too big
- Standoff is too high
- Incorrect nozzle type

## Follow these steps to optimize cut quality:

1. Use the closest known settings for the material being cut.
2. Use a test part that has both interior and exterior features.
3. Verify that the lens and/or window is clean and in good condition.
4. Verify that the nozzle is centered properly and is in good condition.
5. Adjust the focus up and down until the cut quality starts to get bad and then set to the middle of that range.
6. Adjust the gas pressure up and down until the cut starts to get bad and then set to the middle of that range.
7. Adjust the federate up by 5% increments. When the cut starts to get bad, set the feed rate 10% slower.

## Strike a balance between heat levels and gas flow

Cutting mild steel with a laser is a balance of how much material is heated by the laser beam and how much assist gas flows through the cut.

- Heating up too small of an area, or not having enough assist gas flow through the cut will result with the kerf (width of the cut) being too narrow.
- Heating up too large of an area or having too much assist gas flow through the cut will result in the kerf being too wide.

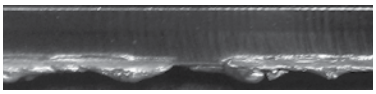
## 3.,2 mm (10 ga.) mild steel cut resulting in too narrow kerf

### Factory cut chart settings



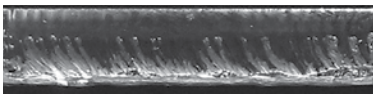
### Focus is too low

The kerf is too narrow and doesn't allow enough $O_2$ into the cut to remove all the molten material.



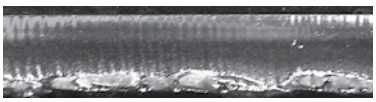
### Feed rate is too fast

The cut striations are trailing the direction of cutting and there is not enough time to remove all the molten material.



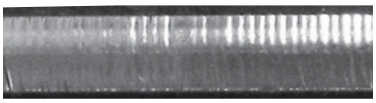
### Gas pressure is too low

There is not enough $O_2$ to remove all the molten material.



### Stand off is too low

The focus spot is in the wrong location, causing the rough edge.

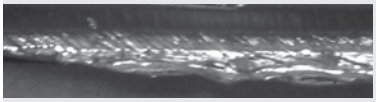


**Cut direction**

## 3.,2 mm (10 ga.) mild steel cut resulting in too wide kerf

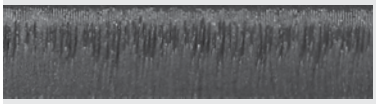


### Factory cut chart settings



### Focus is too high

The laser is melting more material than can be removed from the cut.



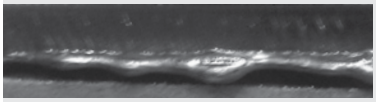
### Feed rate is too slow

The cut surface is too rough and productivity is decreased.



### Gas pressure is too high

Too much $O_2$ results in overheating of the cut and causes intermittent gouges.



### Stand off is too high

The laser is melting more material than can be removed from the cut.



### Nozzle size is too big

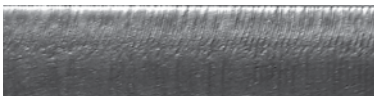
Too much $O_2$ results in overheating of the cut and causes intermittent gouges.

**Cut direction**

*Above samples have been cut with $O_2$ on 2 kW fiber laser. Results will be similar for $CO_2$ laser cutting mild steel with $O_2$.

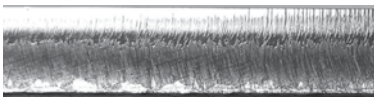
## 6 mm (1/4") mild steel cut resulting in too narrow kerf

### Factory cut chart settings



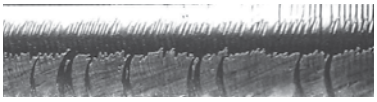
### Focus is too low

The kerf is too narrow and doesn't allow enough $O_2$ into the cut to remove all the molten material.



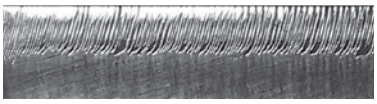
### Feed rate is too fast

The cut striations are trailing the direction of cutting and there is not enough time to remove all the molten material.



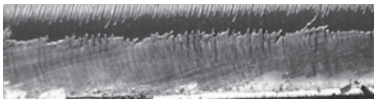
### Gas pressure is too low

There is not enough $O_2$ to remove all the molten material.



### Stand off is too low

The focus spot is in the wrong location, causing the rough edge.

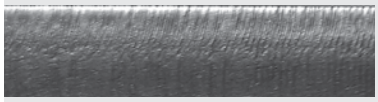


### Nozzle size is too small

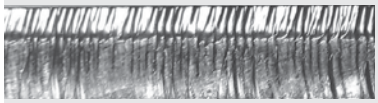
There is not enough $O_2$ to cut uniformly.

**Cut direction**

## 6 mm (1/4") mild steel cut resulting in too wide kerf

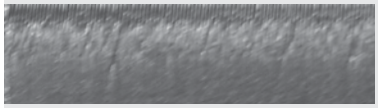


### Factory cut chart settings



### Focus is too high

The wider focus spot is letting too much $O_2$ into the cut and burning the material.



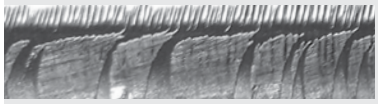
### Feed rate is too slow

The cut surface is too rough and productivity is decreased.



### Gas pressure is too high

Too much $O_2$ is entering the cut, causing a rougher edge and inconsistent cutting.



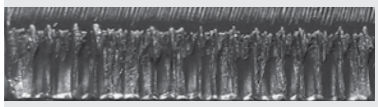
### Stand off is too high

Too much $O_2$ is entering the cut, causing a rougher edge and inconsistent cutting.



### Nozzle size is too big

Too much $O_2$ results in overheating of the cut and causes intermittent gouges.



### Nozzle type is incorrect

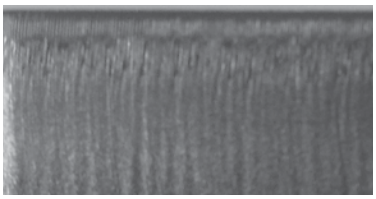
The shape of the gas flow is incorrect, causing a rougher edge.

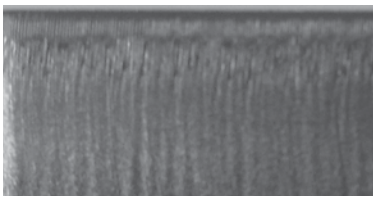
**Cut direction**

*Above samples have been cut with $O_2$ on 2 kW fiber laser. Results will be similar for $CO_2$ laser cutting mild steel with $O_2$.

## 12 mm (1/2") mild steel cut resulting in too narrow kerf

### Factory cut chart settings

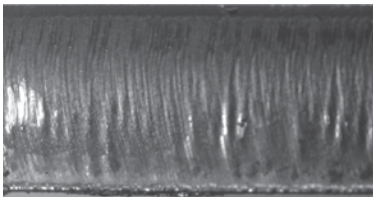


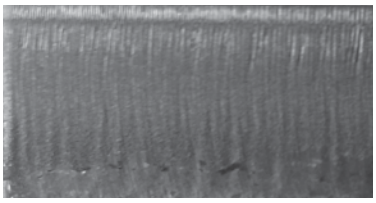


### Factory cut chart settings

### Focus is too low

The kerf is too narrow and doesn't allow enough $O_2$ into the cut to remove all the molten material.



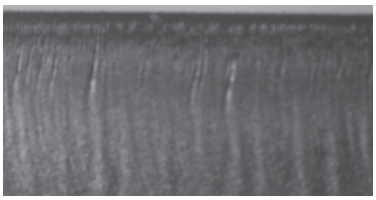


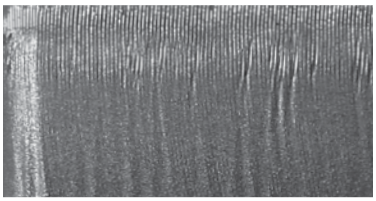
### Stand off is too low

The kerf is too narrow to allow enough $O_2$ into the cut. The oxidation is not covering the entire surface and cutting will be inconsistent.

### Feed rate is too fast

The machine is moving too fast to allow enough $O_2$ into the cut for consistent cutting.





### Nozzle size is too small

There is not enough $O_2$ to cut uniformly.

### Gas pressure is too low

The pressure is too low to allow enough $O_2$ into the cut. The oxidation is not covering the entire surface and cutting will be inconsistent.



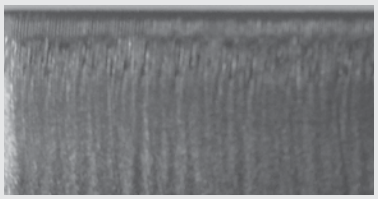
**Cut direction**

**Cut direction**

*Above samples have been cut with $O_2$ on 2 kW fiber laser. Results will be similar for $CO_2$ laser cutting mild steel with $O_2$.

## 12 mm (1/2") mild steel cut resulting in too wide kerf

### Factory cut chart settings

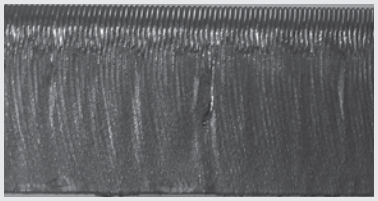


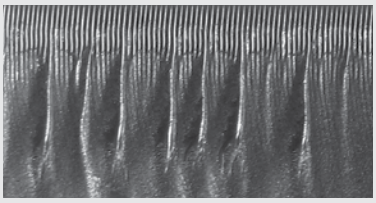


### Factory cut chart settings

### Focus is too high

Too much $O_2$ is entering the cut causing intermittent over burning.



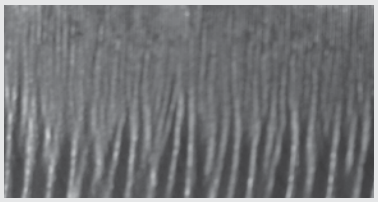


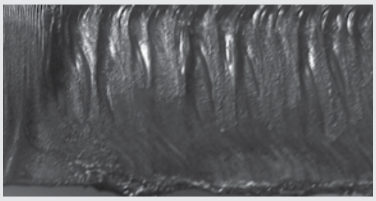
### Stand off is too high

Too much $O_2$ is entering the cut resulting in intermittent over burning.

### Feed rate is too slow

The machine is moving too slow resulting in the over burning of the bottom half of the cut. The slower feed rate also reduces productivity.



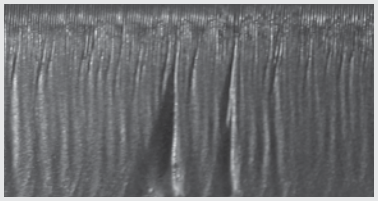


### Incorrect nozzle type

The gas flow shape is not correct resulting in inconsistent cutting.

### Gas pressure is too high

Too much $O_2$ is entering the cut resulting in intermittent over burning.



**Cut direction**

**Cut direction**

*Above samples have been cut with $O_2$ on 2 kW fiber laser. Results will be similar for $CO_2$ laser cutting mild steel with $O_2$.

# Technical support and customer service

Our technical service team can answer questions about any laser cutting system. Whether it's a question about a part, a system or for guidance on how to optimize laser cutting performance, our experts can help.

- OEM trained technicians with over 40 years experience
- Free application support for all laser OEMs
- We stand behind our products with industry-leading technical expertise



Contact a laser expert at ctlaser@hypertherm.com

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