



## 2011 Richardson Electronics CO<sub>2</sub> Laser Consumables Catalog





Richardson Electronics is a global distributor of RF tubes (power grid tubes) and consumables used in CO<sub>2</sub> industrial lasers. With over 60 years of experience and 45 sales offices and stocking locations around the world, we provide the highest standard of quality and service. Our commitment to providing the best products to meet our customers' needs is second to none.

We stock critical components for laser systems and provide expert assistance in selecting replacement products and alternatives.

Richardson Electronics is a world leading supplier of CO<sub>2</sub> laser consumables. We have an extensive global supply network which helps us maintain a large inventory of replacement parts for CO<sub>2</sub> laser machines from the industry's leading manufacturers. Our inventory includes:

- Laser lenses
- Laser nozzles
- RF tubes (power grid tubes)
- and other laser parts

All of Richardson Electronics' CO<sub>2</sub> laser consumables are manufactured to meet the highest standards of quality and performance that meets, or exceeds the OEM's original specifications. Our TRUMPF® laser parts, Bystronic® laser parts, and parts for other major manufacturers deliver the same level of performance as OEM parts, but are a far more cost effective alternative.

Our superior quality parts, outstanding selection, and competitive pricing make us your number one source for CO<sub>2</sub> laser consumables. Contact Richardson Electronics today for more information, or request a quote for your CO<sub>2</sub> laser replacement parts.

## PRODUCT INDEX

Bystronic Laser Parts .....Pages 8-10

Trumpf Laser Parts .....Pages 3-7

Trumpf®, Trumatic® and Trulaser® are registered trademarks of TRUMPF GmbH + Co. KG. Bystronic® is a registered trademark of Bystronic Laser AG. Richardson Electronics, Ltd. is not associated with Trumpf GmbH + Co. KG or Bystronic Laser AG, and the use of the Trumpf and Bystronic names, trademarks and part numbers in this catalogue are for identification and compatibility purposes only. All parts advertised for sale in this catalog are made for and/or by Richardson Electronics, Ltd.

**Consumables for Trumpf® Lasers**  
**Trumatic® L2530, L3030, L3050, L4030, 6000L**  
**L6030, L2503E, L3003E, L4003E & TC600L**

Outline No.	OEM No.	Order No.	DESCRIPTION
-------------	---------	-----------	-------------

**Standard Copper Nozzles**

1	0124561	RNT150/08	Nozzle ø 0.8 mm
	0124562	RNT151/10	Nozzle ø 1.0 mm
	0966809	RNT148/12	Nozzle ø 1.2 mm
	0237497	RNT152/14	Nozzle ø 1.4 mm With Step
	0237497-S	RNT159/14	Nozzle ø 1.4 mm With Straight Taper
	0237500	RNT153/15	Nozzle ø 1.5 mm
	0237501	RNT154/17	Nozzle ø 1.7 mm
	1253211	RNT155/20	Nozzle ø 2.0 mm
	0126933	RNT158/23	Nozzle ø 2.3 mm
	na	RNT156/25	Nozzle ø 2.5 mm
	0942742	RNT149/27	Nozzle ø 2.7 mm
	0237504	RNT157/30	Nozzle ø 3.0 mm

Outline drawings on page 2

**Hard Chromium Plated Nozzles**

1	0352280	RNT150/08C	Nozzle ø 0.8 mm Hard Chromium Plated
	0352281	RNT151/10C	Nozzle ø 1.0 mm Hard Chromium Plated
	0352282	RNT148/12C	Nozzle ø 1.2 mm Hard Chromium Plated
	0352283	RNT152/14C	Nozzle ø 1.4 mm Hard Chromium Plated
	0352284	RNT154/17C	Nozzle ø 1.7 mm Hard Chromium Plated
	1253212	RNT155/20C	Nozzle ø 2.0 mm Hard Chromium Plated
	0352285	RNT158/23C	Nozzle ø 2.3 mm Hard Chromium Plated
	0352286	RNT149/27C	Nozzle ø 2.7 mm Hard Chromium Plated

Outline drawings on page 2

**Long Copper Nozzles**

2	1277773	RNT130/08	Nozzle ø 0.8 mm
	1277771	RNT131/10	Nozzle ø 1.0 mm
	1277774	RNT132/12	Nozzle ø 1.2 mm
	1277776	RNT133/14	Nozzle ø 1.4 mm
	1277779	RNT134/17	Nozzle ø 1.7 mm
	1277780	RNT135/20	Nozzle ø 2.0 mm
	1277781	RNT136/23	Nozzle ø 2.3 mm
	1277782	RNT137/27	Nozzle ø 2.7 mm

Outline drawings on page 2

**Long Nozzles with Hard Chromium Plating**

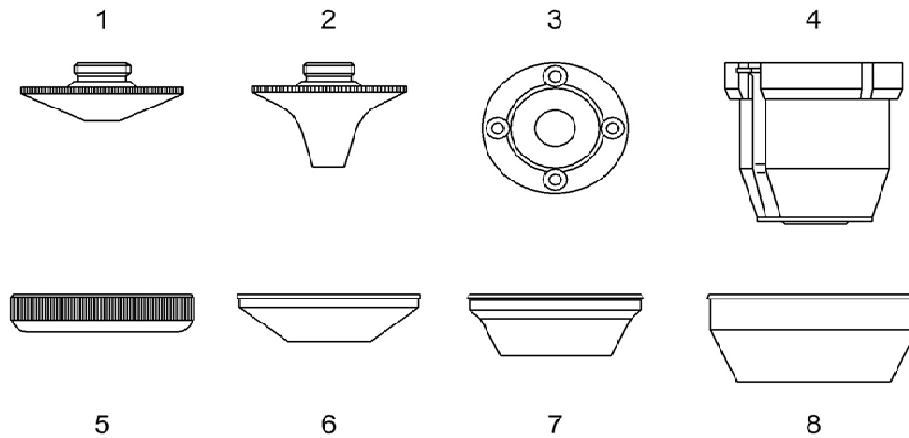
2	na	RNT130/08C	Nozzle ø 0.8 mm Hard Chromium Plated
	na	RNT131/10C	Nozzle ø 1.0 mm Hard Chromium Plated
	na	RNT132/12C	Nozzle ø 1.2 mm Hard Chromium Plated
	na	RNT133/14C	Nozzle ø 1.4 mm Hard Chromium Plated
	na	RNT134/17C	Nozzle ø 1.7 mm Hard Chromium Plated
	na	RNT135/20C	Nozzle ø 2.0 mm Hard Chromium Plated
	na	RNT136/23C	Nozzle ø 2.3 mm Hard Chromium Plated
	na	RNT137/27C	Nozzle ø 2.7 mm Hard Chromium Plated

Outline drawings on page 2

**Richardson Electronics | [www.rellaser.com](http://www.rellaser.com) | [laser@rell.com](mailto:laser@rell.com) | 800.348.5580**

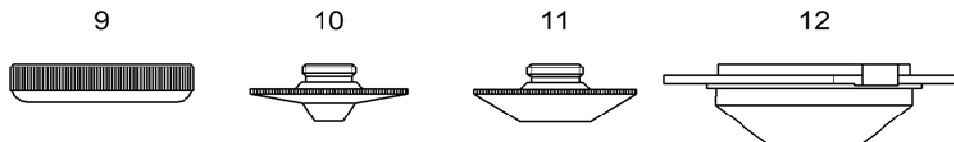
**Consumables for Trumpf® Lasers**  
**Trumatic® L2530, L3030, L3050, L4030, 6000L**  
**L6030, L2503E, L3003E, L4003E & TC600L**

Outline No.	OEM No.	Order No.	DESCRIPTION
3	0234485	RMT163/BAB	Break Away Bar
4	0260432	RHT109/H	Nozzle HOLDER "Ceramic"
5	0216066	RMT165/NUT	Locking Nut
6	0225286	RTT160/TC	Teflon Cover, White (Lasermatic)
7	0254496	RTT161/TC	Teflon Cover, White
8	0256153	RTT162/TC	Teflon Cover DIAS III, White
8	0955826	RTT162/TCB	Teflon Cover DIAS III, Black



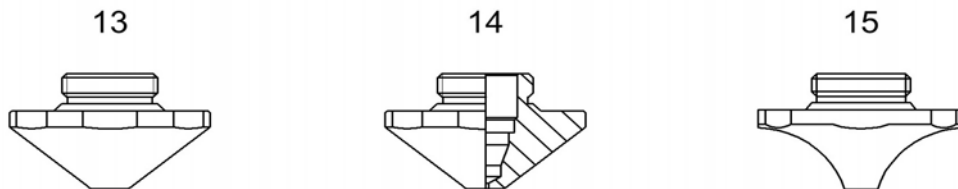
**Consumables for Trumpf® Lasers**  
**L1003, L2503, L3003 & L4003**

Outline No.	OEM No.	Order No.	DESCRIPTION
10	0215780	RNT100/08	Nozzle $\phi$ 0.8 mm
	087658	RNT101/10	Nozzle $\phi$ 1.0 mm
	088894	RNT102/14	Nozzle $\phi$ 1.4 mm (High Pressure)
	0217867	RNT104/17	Nozzle $\phi$ 1.7 mm (High Pressure)
11	088893	RNT103/15	Nozzle $\phi$ 1.5 mm
	0221781	RNT105/20	Nozzle $\phi$ 2.0 mm
	0235592	RNT108/30	Nozzle $\phi$ 3.0 mm
9	0216066	RMT165/NUT	Locking Nut
12	0216065	RTT112/TC	Teflon Cover, White



Consumables for Trumpf® TruLaser® Lasers  
5030, 5040 & 5060 (6/7kW Lasers)

Outline No.	OEM No.	Order No.	DESCRIPTION
13	1324858	RNT060/08	Nozzle ø EAA 0.8 mm
	1324860	RNT061/10	Nozzle ø EAA 1.0 mm
	1324861	RNT062/12	Nozzle ø EAA 1.2 mm
	1324863	RNT063/14	Nozzle ø EAA 1.4 mm
	1324864	RNT064/17	Nozzle ø EAA 1.7 mm
	1324865	RNT065/20	Nozzle ø EAA 2.0 mm
	1324866	RNT066/20	Nozzle ø EAA 2.3 mm
	1324867	RNT067/27	Nozzle ø EAA 2.7 mm
14	na	RNT060/08D	Double Nozzle ø 0.8 mm
	na	RNT061/10D	Double Nozzle ø 1.0 mm
	na	RNT062/12D	Double Nozzle ø 1.2 mm
	na	RNT063/14D	Double Nozzle ø 1.4 mm
	na	RNT064/17D	Double Nozzle ø 1.7 mm
	na	RNT065/20D	Double Nozzle ø 2.0 mm
	na	RNT066/23D	Double Nozzle ø 2.3 mm
	na	RNT067/27D	Double Nozzle ø 2.7 mm
15	1373324	RNT070/08	Nozzle ø EAB 0.8 mm
	1373325	RNT071/10	Nozzle ø EAB 1.0 mm
	1373326	RNT072/12	Nozzle ø EAB 1.2 mm
	1373327	RNT073/14	Nozzle ø EAB 1.4 mm
	1373328	RNT074/17	Nozzle ø EAB 1.7 mm
	1373329	RNT075/20	Nozzle ø EAB 2.0 mm
	1373330	RNT076/23	Nozzle ø EAB 2.3 mm
	1373331	RNT077/27	Nozzle ø EAB 2.7 mm



**Consumables for Trumpf® Lasers  
TLC105**

Outline No.	OEM No.	Order No.	DESCRIPTION
16	913965	RMT007/NUT	Locking Nut

**Standard Copper Nozzles**

17	0212334	RNT010/10	Nozzle ø 1.0 mm
	na	RNT025/10	Nozzle ø 1.0 mm
	0216199	RNT011/14	Nozzle ø 1.4 mm
	0225213	RNT012/17	Nozzle ø 1.7 mm
	0126156	RNT028/23	Nozzle ø 2.3 mm
20	0237364	RNT019/10	Shower Nozzle ø 1.0 mm
18	0226939	RNT013/10	Nozzle ø 1.0 mm
	na	RNT026/10	Nozzle ø 1.0 mm
	0226940	RNT014/14	Nozzle ø 1.4 mm
	0227144	RNT015/17	Nozzle ø 1.7 mm
	na	RNT029/23	Nozzle ø 2.3 mm
19	na	RNT016/10	Nozzle ø 1.0 mm
	na	RNT017/14	Nozzle ø 1.4 mm
	na	RNT018/17	Nozzle ø 1.7 mm
	na	RNT030/23	Nozzle ø 2.3 mm
21	0135320	RNT225/10	Nozzle ø 1.0 mm Rough Edged
	na	RNT226/12	Nozzle ø 1.2 mm Rough Edged
	0135318	RNT220/14	Nozzle ø 1.4 mm Rough Edged
	0126157	RNT221/17	Nozzle ø 1.7 mm Rough Edged

**Hard Chromium Plated Nozzles**

17	0212334	RNT010/10C	Nozzle ø 1.0 mm Hard Chromium Plated
	na	RNT025/10C	Nozzle ø 1.0 mm Hard Chromium Plated
	0216199	RNT011/14C	Nozzle ø 1.4 mm Hard Chromium Plated
	0225213	RNT012/17C	Nozzle ø 1.7 mm Hard Chromium Plated
	0126156	RNT028/23C	Nozzle ø 2.3 mm Hard Chromium Plated
18	0226939	RNT013/10C	Nozzle ø 1.0 mm Hard Chromium Plated
	na	RNT026/10C	Nozzle ø 1.0 mm Hard Chromium Plated
	0226940	RNT014/14C	Nozzle ø 1.4 mm Hard Chromium Plated
	0227144	RNT015/17C	Nozzle ø 1.7 mm Hard Chromium Plated
	na	RNT029/23C	Nozzle ø 2.3 mm Hard Chromium Plated
19	na	RNT016/10C	Nozzle ø 1.0 mm Hard Chromium Plated
	na	RNT017/14C	Nozzle ø 1.4 mm Hard Chromium Plated
	na	RNT018/17C	Nozzle ø 1.7 mm Hard Chromium Plated
	na	RNT030/23C	Nozzle ø 2.3 mm Hard Chromium Plated
21	0135320	RNT225/10C	Nozzle ø 1.0 mm Rough Edged Hard Chromium Plated
	na	RNT226/12C	Nozzle ø 1.2 mm Rough Edged Hard Chromium Plated
	0135318	RNT220/14C	Nozzle ø 1.4 mm Rough Edged Hard Chromium Plated
	0126157	RNT221/17C	Nozzle ø 1.7 mm Rough Edged Hard Chromium Plated

Outline drawings on page 5

Consumables for Trumf® Lasers  
TLC1005

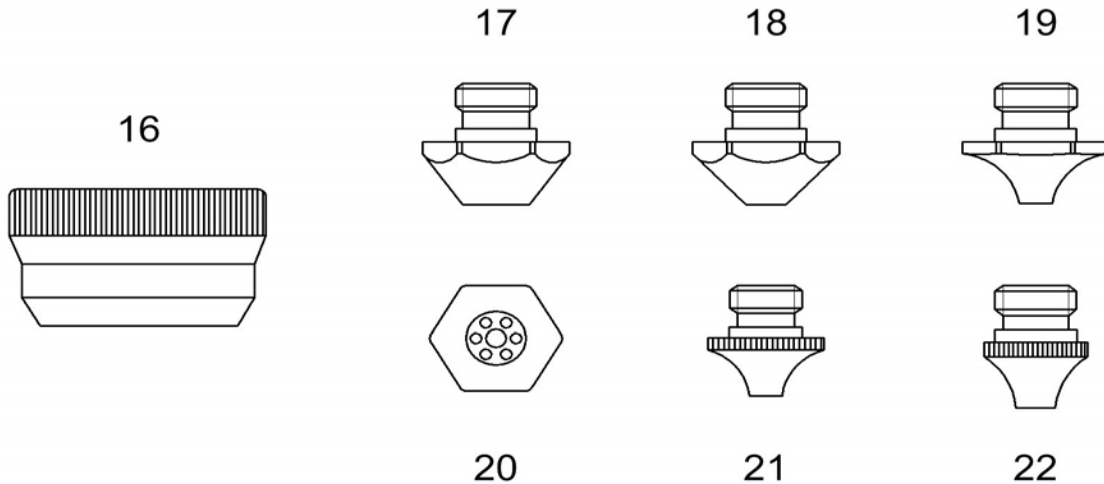
Outline No.	OEM No.	Order No.	DESCRIPTION
16	913965	RMT007/NUT	Locking Nut

Standard Copper Nozzles

22	0958206	RNT006/025	"Teach" Nozzle $\phi$ 0.25 mm
	0913799	RNT020/08	Nozzle $\phi$ 0.8 mm
	0913800	RNT021/10	Nozzle $\phi$ 1.0 mm
	0913801	RNT022/14	Nozzle $\phi$ 1.4 mm
	0937988	RNT023/17	Nozzle $\phi$ 1.7 mm
	0937989	RNT024/23	Nozzle $\phi$ 2.3 mm

Hard Chromium Plated Nozzles

22	0913799	RNT020/08C	Nozzle $\phi$ 0.8 mm Hard Chromium Plated
	0913800	RNT021/10C	Nozzle $\phi$ 1.0 mm Hard Chromium Plated
	0913801	RNT022/14C	Nozzle $\phi$ 1.4 mm Hard Chromium Plated
	0937988	RNT023/17C	Nozzle $\phi$ 1.7 mm Hard Chromium Plated
	0937989	RNT024/23C	Nozzle $\phi$ 2.3 mm Hard Chromium Plated

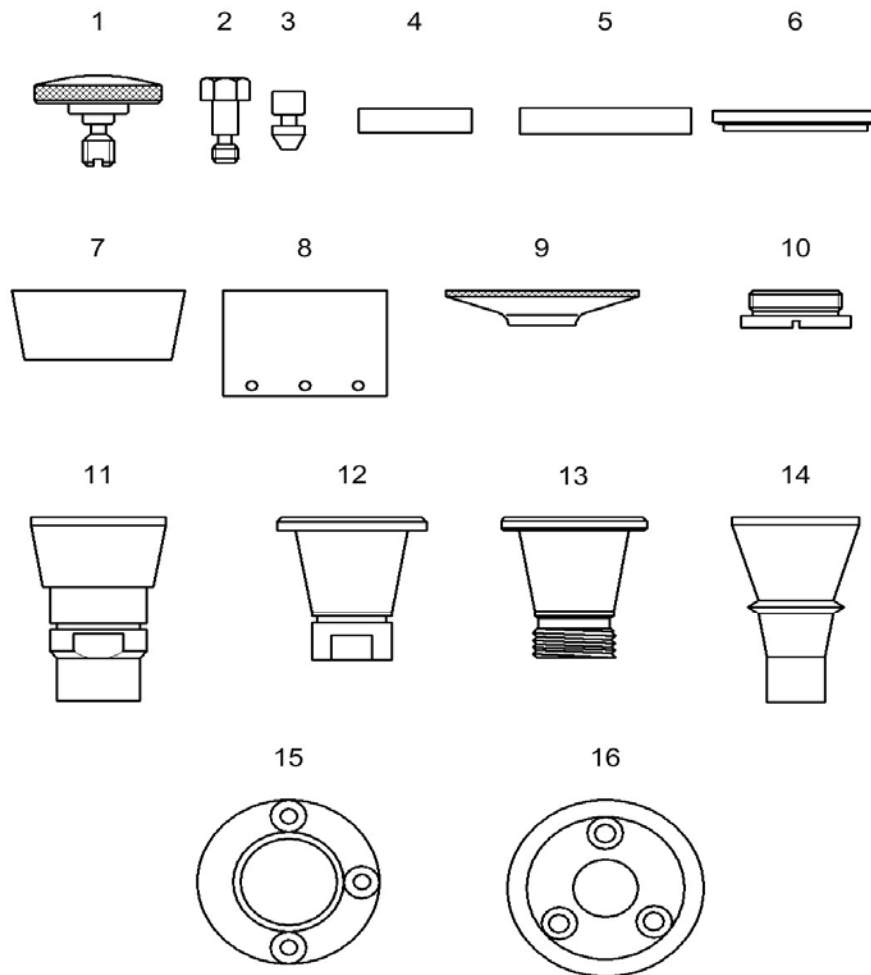


Lenses

OEM No.	Order No.	DESCRIPTION
088114	RLT100/50S	5" F/L Standard Lens
097517	RLT101/75S	7.5" F/L Standard Lens
088114	RLT200/50LA	5" F/L Low Absorption
097517	RLT201/75LA	7.5" F/L Low Absorption

**Consumables for Bystronic® BY Series Lasers**

Outline No.	OEM No.	Order No.	DESCRIPTION
1	4-03136	RMB437/SCW	Knurled Screw
2	4-00324	RMB438/SCW	Screw
3	4-03137	RMB439/PIN	Pin
4	4-09010	RNB470/CR	Ceramic Insulating Ring
5	4-01642	RNB433/R	Ceramic Insulating Ring
6	3-13113-1	RNB493/SIR	Ceramic Insulating Ring - Small
7	4-01959	RNB434/R	Conical Ceramic Insulating Ring
8	3-13422	RNB494/LIR	Insulating Ring - Large
9	2-08700	RMB472/SH	Shield Copper
10	3-11071	RMB473/NUT	Fastener Nut
11	3-02291	RNB474/B	Nozzle Body
12	3-05497	RNB432/B	Nozzle Body
13	2-08701	RNB471/B	Nozzle Body
14	2-10837-1	RNB495/B	Nozzle Body
15	3-06035	RMB440/TD	Teflon Insulating Disk
16	3-03663	RMB469/TD	Teflon Insulating Disk (formerly 3-02951)



Richardson Electronics | [www.rellaser.com](http://www.rellaser.com) | [laser@rell.com](mailto:laser@rell.com) | 800.348.5580



**Consumables for Bystronic® BY Series Lasers**

Outline No.	OEM No.	Order No.	DESCRIPTION
<b>Standard Copper Nozzles</b>			
19	3-01894	RNB403/10	Nozzle 1.0mm
	3-01895	RNB404/125	Nozzle 1.25mm
	3-01896	RNB405/15	Nozzle 1.5mm
19	3-01899	RNB408/10	Nozzle 1.0mm
	3-01900	RNB409/125	Nozzle 1.25mm
	3-01901	RNB410/15	Nozzle 1.5mm
	3-01902	RNB411/175	Nozzle 1.75mm
	3-01903	RNB412/20	Nozzle 2.0mm
17	3-01905	RNB413/10	Nozzle 1.0mm
	3-01906	RNB414/125	Nozzle 1.25mm
	3-01907	RNB415/15	Nozzle 1.5mm
	3-01908	RNB416/175	Nozzle 1.75mm
	3-01909	RNB417/20	Nozzle 2.0mm
	3-04274	RNB426/25	Nozzle 2.5mm
17	3-01910	RNB418/10	Nozzle 1.0mm
	3-01911	RNB419/125	Nozzle 1.25mm
	3-01912	RNB420/15	Nozzle 1.5mm
	3-01913	RNB421/175	Nozzle 1.75mm
	3-01914	RNB422/20	Nozzle 2.0mm
	3-03854	RNB423/25	Nozzle 2.5mm
	3-06112	RNB425/30	Nozzle 3.0mm
	na	RNB424/35	Nozzle 3.5mm

Outline drawings on page 8

<b>Hard Chromium Plated Nozzles</b>			
19	3-01894	RNB403/10C	Nozzle 1.0mm Hard Chromium Plated
	3-01895	RNB404/125C	Nozzle 1.25mm Hard Chromium Plated
	3-01896	RNB405/15C	Nozzle 1.5mm Hard Chromium Plated
19	3-01899	RNB408/10C	Nozzle 1.0mm Hard Chromium Plated
	3-01900	RNB409/125C	Nozzle 1.25mm Hard Chromium Plated
	3-01901	RNB410/15C	Nozzle 1.5mm Hard Chromium Plated
	3-01902	RNB411/175C	Nozzle 1.75mm Hard Chromium Plated
	3-01903	RNB412/20C	Nozzle 2.0mm Hard Chromium Plated
17	3-01905	RNB413/10C	Nozzle 1.0mm Hard Chromium Plated
	3-01906	RNB414/125C	Nozzle 1.25mm Hard Chromium Plated
	3-01907	RNB415/15C	Nozzle 1.5mm Hard Chromium Plated
	3-01908	RNB416/175C	Nozzle 1.75mm Hard Chromium Plated
	3-01909	RNB417/20C	Nozzle 2.0mm Hard Chromium Plated
	3-04274	RNB426/25C	Nozzle 2.5mm Hard Chromium Plated
17	3-01910	RNB418/10C	Nozzle 1.0mm Hard Chromium Plated
	3-01911	RNB419/125C	Nozzle 1.25mm Hard Chromium Plated
	3-01912	RNB420/15C	Nozzle 1.5mm Hard Chromium Plated
	3-01913	RNB421/175C	Nozzle 1.75mm Hard Chromium Plated
	3-01914	RNB422/20C	Nozzle 2.0mm Hard Chromium Plated
	3-03854	RNB423/25C	Nozzle 2.5mm Hard Chromium Plated
	3-06112	RNB425/30C	Nozzle 3.0mm Hard Chromium Plated
	na	RNB424/35C	Nozzle 3.5mm Hard Chromium Plated

 Richardson Electronics | [www.rellaser.com](http://www.rellaser.com) | [laser@rell.com](mailto:laser@rell.com) | 800.348.5580

Outline drawings on page 8

Product availability and prices are subject to change without notice.

\* All NOZZLES are sold in packages of 10. All other accessories are sold individually.

**Consumables for Bystronic® BY Series Lasers**

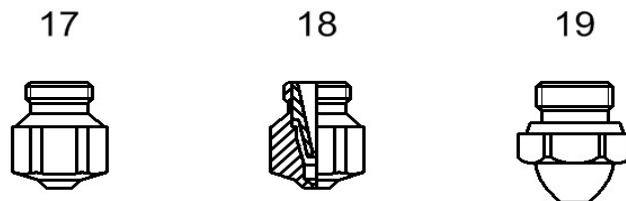
Outline No.	OEM No.	Order No.	DESCRIPTION
-------------	---------	-----------	-------------

**Standard Copper Nozzles**

18	3-16058	RNB428/10D	Double Nozzle 1.0mm
	3-16059	RNB429/12D	Double Nozzle 1.2mm
	3-16060	RNB430/15D	Double Nozzle 1.5mm
	3-14317	RNB431/17D	Double Nozzle 1.7mm
	3-14318	RNB432/20D	Double Nozzle 2.0mm
	3-14319	RNB433/25D	Double Nozzle 2.5mm
	3-16256	RNB433/25DA	Double Aluminum Nozzle 2.5mm
	3-16061	RNB435/30D	Double Nozzle 3.0mm
	3-16257	RNB435/30DA	Double Aluminum Nozzle 3.0mm
	na	RNB434/35D	Double Nozzle 3.5mm

**Hard Chromium Plated Nozzles**

18	3-16058	RNB418/10DC	Double Nozzle 1.0mm Hard Chromium Plated
	3-16059	RNB419/12DC	Double Nozzle 1.2mm Hard Chromium Plated
	3-16060	RNB420/15DC	Double Nozzle 1.5mm Hard Chromium Plated
	3-14317	RNB421/17DC	Double Nozzle 1.7mm Hard Chromium Plated
	3-14318	RNB422/20DC	Double Nozzle 2.0mm Hard Chromium Plated
	3-14319	RNB423/25DC	Double Nozzle 2.5mm Hard Chromium Plated
	3-16256	RNB423/25DAC	Double Aluminum Nozzle 2.5mm Hard Chromium Plated
	3-16061	RNB425/30DC	Double Nozzle 3.0mm Hard Chromium Plated
	3-16257	RNB425/30DAC	Double Aluminum Nozzle 3.0mm Hard Chromium Plated
	na	RNB424/C	Nozzle 3.5mm Hard Chromium Plated


**Lenses**

OEM No.	Order No.	DESCRIPTION
4-05094	RLB400/50S	5" F/L Standard Lens
4-05095	RLB401/75S	7.5" F/L Standard Lens
4-05094	RLB500/50LA	5" F/L Low Absorption
4-05095	RLB501/75LA	7.5" F/L Low Absorption