

TALAS

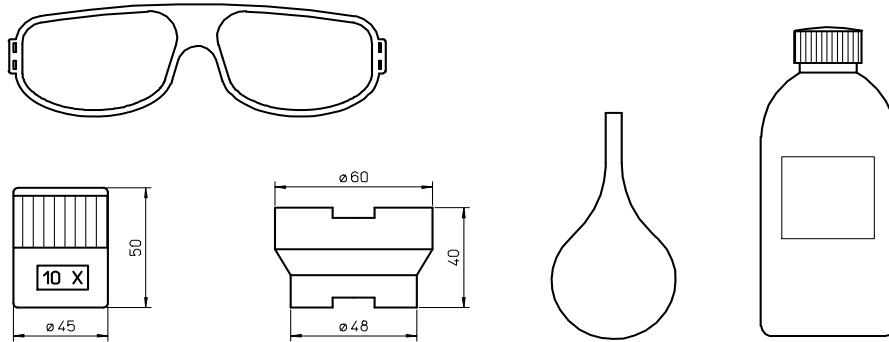


CO₂ laser consumables – Mitsubishi®

TALAS

Paardenkerkhofstraat 56 B-2800 Mechelen
Tel. 015.61.60.07 Fax. 015.61.75.27 Email. info@talas.be

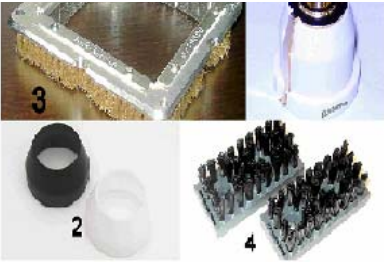
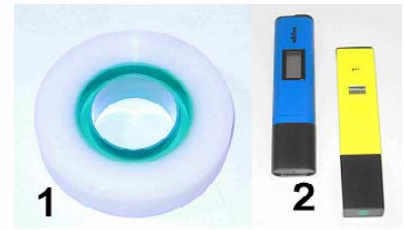
ACCESSORIES

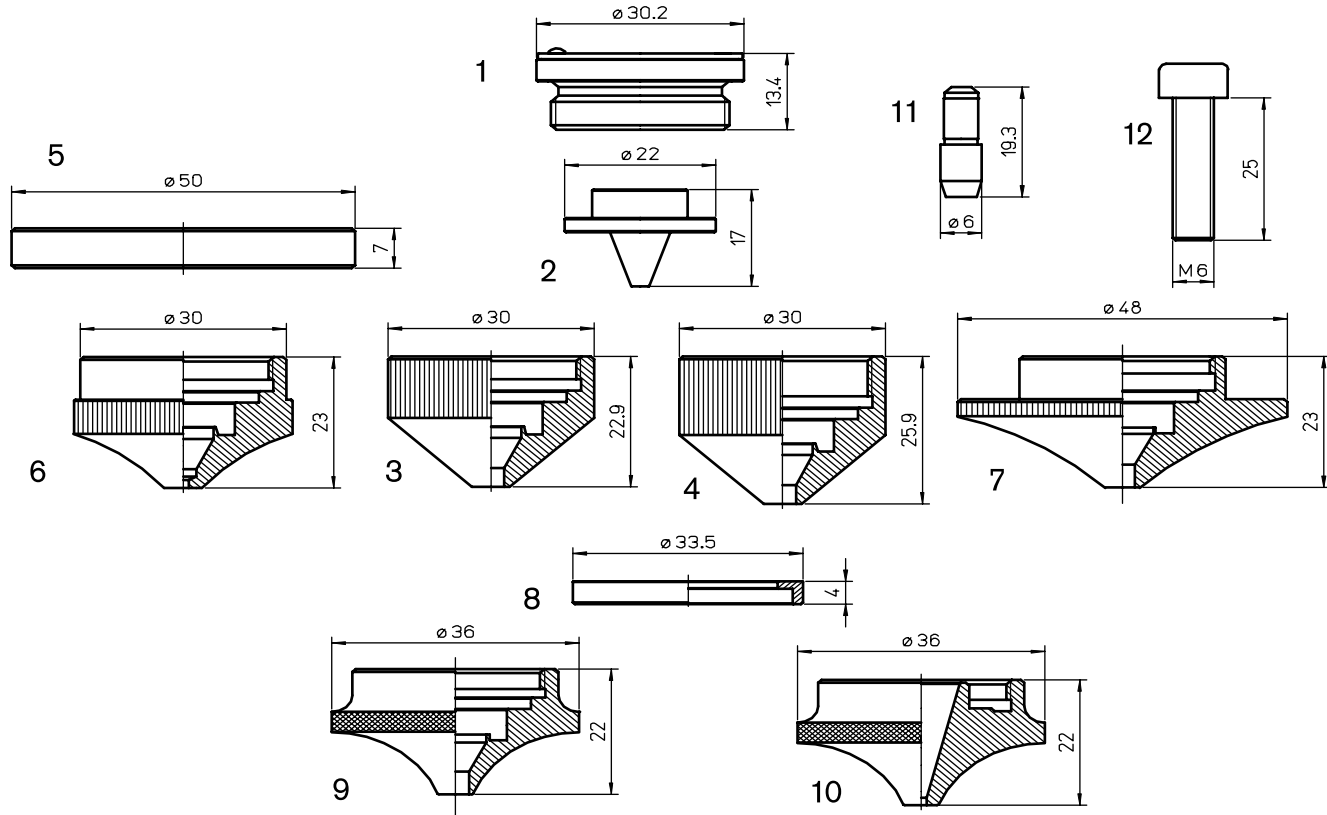


POS	Talas CODE	ORIGINAL CODE	DESCRIPTION
	AL1100		LASER CO ² GLASSES CE APPROVED
	AL1100017		LASER ECO CO ² GLASSES CE APPROVED 1.5-4.0kW
	AL1100015		LASER PROTECTOR CO ² GLASSES CE APPROVED 1.5-4.0kW
	AL1100018		LASER PROTECTOR CO ² GLASSES CE APPROVED 1.5-4.0kW
	GLADIATOR		LASER OVERGLASSES CO ² LIGHT VERSION 80g
	OVERSPEC		LASER OVERGLASSES CO ² VERSION 1500-4000W
	AL1001	123602	LENS CLEANING LIQUID - ml 200
	AL1001/L	123602	LENS CLEANING LIQUID - ml 1000
	AL1003-100	240568-100	LENS CLEANING POLISH - ml 100
	AL1003-200	240568-200	LENS CLEANING POLISH - ml 200
	AL1004		POLISH DETERGENT
	AL1010		DROPPER FOR LENS CLEANING LIQUID
	AL1120		LATEX GLOVES - 10 pieces
	ALI115		INDIUM WIRE Ø 1.0mm FOR 1.5" LENS
	ALI115/M		MAZAK® INDIUM 0.8mm FOR 1.5" MAZAK® LENS
	ALI120		INDIUM WIRE Ø 1.0mm FOR Ø 2.0mm LENS
	ALI120/M		MAZAK® INDIUM 0,8mm FOR 2,0" LENS
	SC50		LENS CLEANING PAPER - 75x135 - 50sheets
	SC100		KODAK LENS CLEANING PAPER - 70x120 - 50sheets
	SC105		LENS CLEANING PAPER - 100x105 - 50sheets
	SC20		COTTON SWAB -20 pieces
	AL1115		LENS CLEANING PRE-CUT COTTON - 100 pieces
	AL255	091860	SCALE LUPE
	AL271		BASE FOR LENS MAINTENANCE FOR 1,5" & 2,0" LENS
	AL282		INJECTOR
	350424-005		Lens Cleaning Holder 1.5" with Polarisors
	350423-005		Lens Cleaning Holder 2.0" with Polarisors
	910000		Lens Cleaning Kit
	020003-101		EZ Clean Wipes for Easy Lens Cleaning/ 24Pack

TALAS

Paardenkerkhofstraat 56 B-2800 Mechelen
 Tel. +32(0)15.61.60.07 Fax. +32(0)15.61.75.27
 Email. info@talas.be

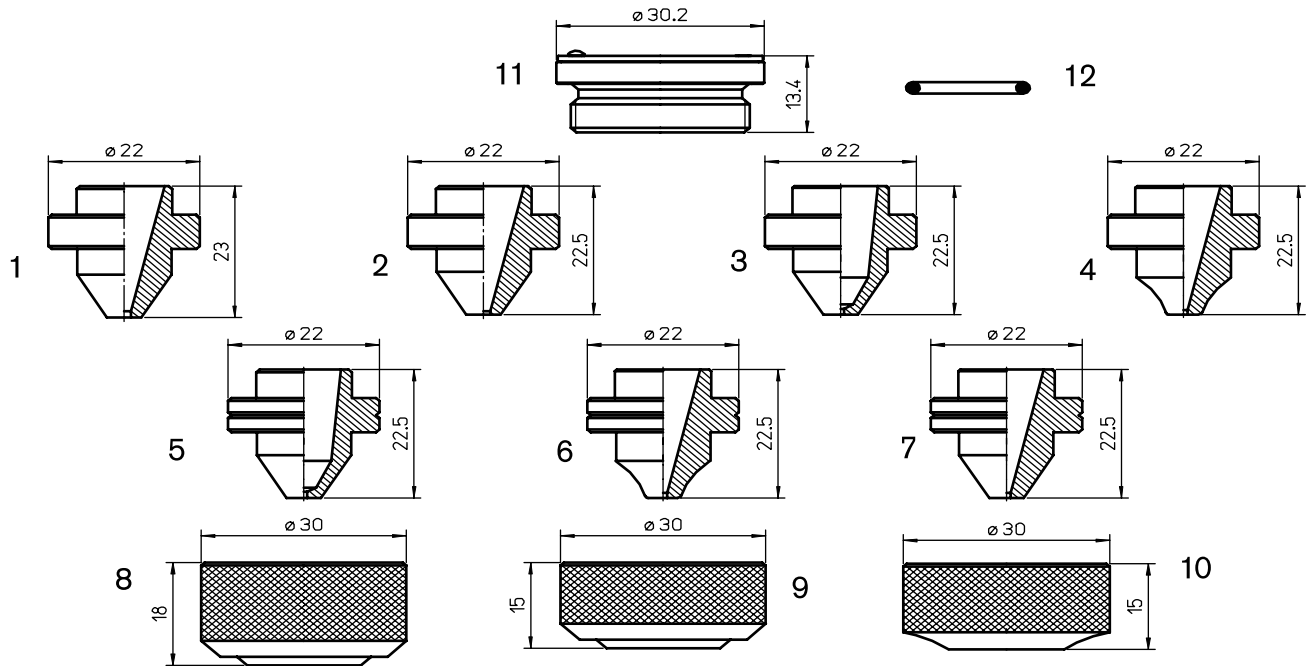




Consumables

	Centricut part number	Reference number	Alternate reference	Description	Pkg qty
1	MB334-0001	P0594-860-00001	AL267	Nozzle Holder – IT HP2 MZP/MEL	1
	MB316-390	W390	L288	Double nozzle insert – 4 holes	1
	MB316-2706	W270-6	L835	Double nozzle insert – 6 holes	1
	MB316-270	W270	L280	Double nozzle insert – 8 holes	1
2	MB316-387	W387	L289	Double nozzle insert – 12 holes	1
	MB316-388	W388	L290	Double nozzle insert – 16 holes	1
	MB316-389	W389	L836	Double nozzle insert – 20 holes	1
	MB316-515	W515	L291	Double nozzle insert – 24 Holes	1
3	MB316-269S	71800027, BQ933D221H04, P0593-860-00001	AL238	Shield cap – short	1
	MB316-269SCP		AL238X	Shield cap – short CP	1
4	MB316-269	W269	AL65	Shield cap	1
	MB316-269CP		AL65X	Shield cap CP	1
5	AM416-0001		AL297	Ring (plastic)	1
	AM416-0002		AL302	Nozzle – 1.7 mm (outer)	1
	AM416-0003		AL303	Nozzle – 2.0 mm (outer)	1
6	AM416-0004		AL304	Nozzle – 2.5 mm (outer)	1
	AM416-0005		AL305	Nozzle – 3.0 mm (outer)	1
	AM416-0006		AL306	Nozzle – 4.0 mm (outer)	1
7	MB316-0440	BQ933D04YH01	AL266	Nozzle, outer – high speed pierce	1
8	AM416-0155T	71800155TF, BQ023D021H01	AL341-T	Insulation ring – Teflon®	1
	AM416-0155A	71800155AL, BQ023D021H01	AL341-A	Insulation ring – aluminum	1
9	AM416-2197	71802197, BQ933D044H01	AL270	Nozzle, outer	1
10	AM416-5400	7180015400, BQ023D020H01	L1262	Nozzle – 1.7 mm high speed pierce	1
11	AM416-0009	71800009, P921K000P25, JPZA5-6	AL345	Safety pin	1
12	AM416-A005	71800008, L249OA005	AL346	Safety screw	1

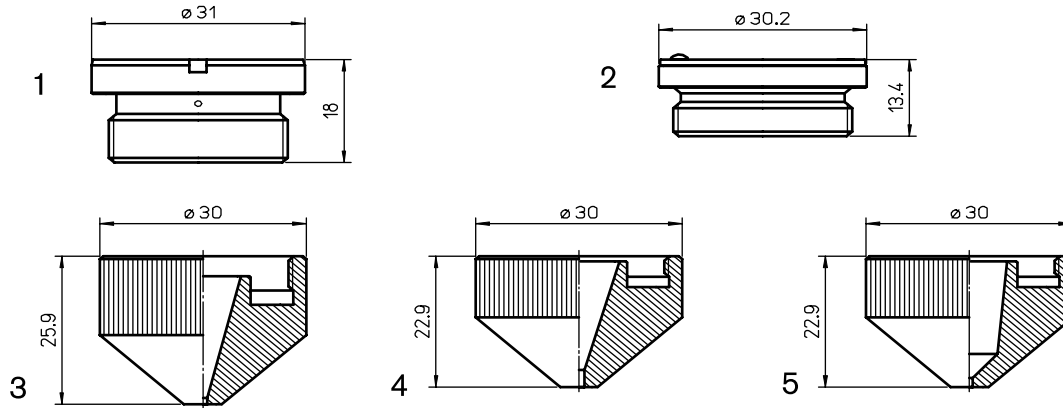
New items shown in bold



Consumables

Centricut part number	Reference number	Alternate reference	Description	Pkg qty
MB327-327-1		L354	Nozzle – 1.0 mm	1
MB327-777	W777	L363	Nozzle – 1.2 mm	1
MB327-266	W266	L355	Nozzle – 1.5 mm	1
1 MB327-267	W267	L356	Nozzle – 2.0 mm	1
MB327-776	W776	L357	Nozzle – 2.5 mm	1
MB327-268	W268	L358	Nozzle – 3.0mm	1
MB327-268-3.5	W268-3.5	L359	Nozzle – 3.5 mm	1
AM326-0018	71800018, BQ943D157H01	L1134	Nozzle – 1.5 mm	1
AM326-0019	71800019, BQ943D157H02	L1135	Nozzle – 2.0 mm	1
2 AM326-0020	71800020, BQ943D157H03	L1136	Nozzle – 2.5 mm	1
AM326-0021	71800021, BQ943D157H04	L1137	Nozzle – 3.0 mm	1
AM326-0022	71800022, BQ943D596H01	L1138	Nozzle – 3.5 mm	1
AM387-0016	71800016, BQ943D897H01, W18Q94389701	L1125	Nozzle – 1.0 mm	1
3 AM387-1901	W18Q93309101	L1128	Nozzle – 2.5 mm	1
AM387-1902	W18Q93309102	L1129	Nozzle – 3.0 mm	1
4 AM387-0001	71800016A0, BQ933D283H01	L1126	Nozzle – 1.0 mm w/radius no grooves	1
MB327-0010		L965	Nozzle – 1.0 mm	1
MB327-0012		L966	Nozzle – 1.2 mm	1
5 MB327-0015		L967	Nozzle – 1.5 mm	1
MB327-0017		L964	Nozzle – 1.7 mm	1
MB327-0020		L968	Nozzle – 2.0 mm	1
MB327-0025		L969	Nozzle – 2.5 mm	1
6 AM387-0017	71800017, BQ943D269H01, W18Q93326901	L1130	Nozzle – 1.2 mm w/radius	1
7 AM387-2701	W18Q93302701	L1132	Nozzle – 1.7 mm	1
8 MB327-263	W263	AL116	Nozzle nut	1
9 MB327-263S		AL240	Nozzle nut short	1
10 AM367-0269	71800026, BQ933D94H01	AL269	Nozzle nut short	1
11 MB334-0001	P0594-860-00001	AL267	Nozzle holder – IT HP2 MZP/MEL	1
12 MB334-W290	W290	AL388	O-ring	1

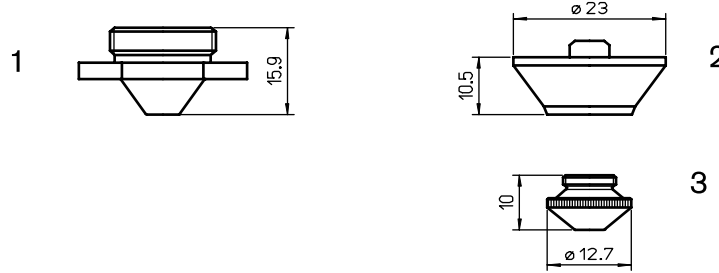
New items shown in bold



Consumables

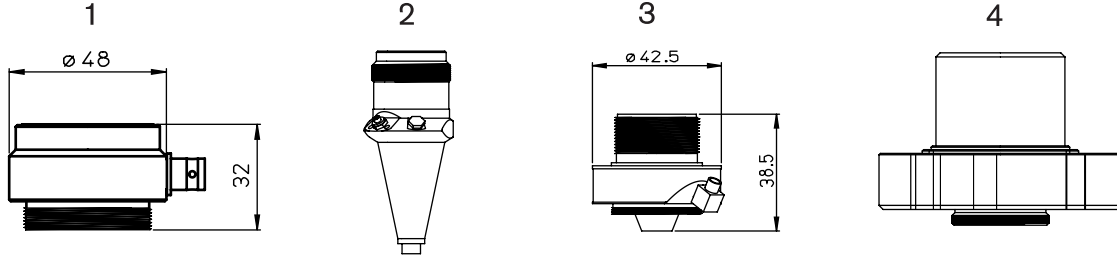
	Centricut part number	Reference number	Alternate reference	Description	Pkg qty
1	MB334-0830	P0461-230-00001, W830	AL373	Nozzle Holder – IT461	1
2	MB334-0001	P0594-860-00001	AL267	Nozzle holder – IT HP2 MZP/MEL	1
	MB334-1249	W1249	L398	Nozzle – 1.0 mm	1
	MB334-1256	W1256	L397	Nozzle – 1.2 mm	1
	MB334-1250	W1250	L399	Nozzle – 1.5 mm	1
3	MB334-1251	W1251	L702	Nozzle – 2.0 mm	1
	MB334-1252	W1252	L703	Nozzle – 2.5 mm	1
	MB334-1253	W1253	L704	Nozzle – 3.0 mm	1
	MB334-1254	W1254	L705	Nozzle – 3.5 mm	1
	MB334-1255	W1255	L706	Nozzle – 4.0 mm	1
	MB334-1626	W1626	L910	Nozzle – 1.0 mm	1
	MB334-1627	W1627	L911	Nozzle – 1.2 mm	1
	MB334-1628	W1628	L912	Nozzle – 1.5 mm	1
	MB334-1661	W1661	L918	Nozzle – 1.7 mm	1
	MB334-1629	W1629	L913	Nozzle – 2.0 mm	1
	MB334-1630	W1630	L914	Nozzle – 2.5 mm	1
	MB334-1664	W1664	L915	Nozzle – 3.0 mm	1
	MB334-1665	W1665	L916	Nozzle – 3.5 mm	1
	MB334-1666	W1666	L917	Nozzle – 4.0 mm	1
4	MB334-1663	W1663	L919	Nozzle – 5.0 mm	1
	MB334-1626CP	W1626	L910X	Nozzle – 1.0 mm CP	1
	MB334-1627CP	W1627	L911X	Nozzle – 1.2 mm CP	1
	MB334-1628CP	W1628	L912X	Nozzle – 1.5 mm CP	1
	MB334-1661CP	W1661	L918X	Nozzle – 1.7 mm CP	1
	MB334-1629CP	W1629	L913X	Nozzle – 2.0 mm CP	1
	MB334-1630CP	W1630	L914X	Nozzle – 2.5 mm CP	1
	MB334-1664CP	W1664	L915X	Nozzle – 3.0 mm CP	1
	MB334-1665CP	W1665	L916X	Nozzle – 3.5 mm CP	1
	MB334-1666CP	W1666	L917X	Nozzle – 4.0 mm CP	1
	MB334-1626B	W1626B	L1078	Nozzle – 1.0 mm low pressure	1
	MB334-1627B	W1627B	L1079	Nozzle – 1.2 mm low pressure	1
	MB334-1628B	W1628B	L1080	Nozzle – 1.5 mm low pressure	1
5	MB334-1629B	W1629B	L1081	Nozzle – 2.0 mm low pressure	1
	MB334-1630B	W1630B	L1082	Nozzle – 2.5 mm low pressure	1
	MB334-1664B	W1664B	L1083	Nozzle – 3.0 mm low pressure	1
	MB334-1665B	W1665B	L1084	Nozzle – 3.5 mm low pressure	1
	MB334-1666B	W1666B	L1085	Nozzle – 4.0 mm low pressure	1

New items shown in bold



Consumables

	Centricut part number	Reference number	Alternate reference	Description	Pkg qty
	MB330-000		L548	Nozzle – 1.0 mm	1
	MB330-001	W001	L549	Nozzle – 1.5 mm	1
1	MB330-002	W002	L550	Nozzle – 2.0 mm	1
	MB330-004	W004	L551	Nozzle – 2.5 mm	1
	MB330-003	W003	L552	Nozzle – 3.0 mm	1
2	PT344-1079	281079, P0492-430-00003, W149	AL138	OEM nozzle holder KTM1.5" S F2.5"	1
	PT344-0013	280013, P0492-441-00008	L400	Nozzle – 0.8 mm	1
	PT344-0013X	280013, P0492-441-00008	L30400	Nozzle – 0.8 mm (10 pack)	10
	PT344-0014	280014, P0492-442-00010, W223	L401	Nozzle – 1.0 mm	1
	MB336-223X	280014, P0492-442-00010, W223	L30401	Nozzle – 1.0 mm (10 pack)	10
	PT344-0015	280015, P0492-443-00012	L402	Nozzle – 1.2 mm	1
	PT344-0015X	280015, P0492-443-00012	L30402	Nozzle – 1.2 mm (10 pack)	10
	MB336-224	280016, P0492-444-00015, W224	L403	Nozzle – 1.5 mm	1
	MB336-224X	280016, P0492-444-00015, W224	L30403	Nozzle – 1.5 mm (10 pack)	10
	PT344-0018	P0492-447-00018	L543	Nozzle – 1.8 mm	1
	PT344-0018X	P0492-447-00018	L30543	Nozzle – 1.8 mm (10 pack)	10
	PT344-0937	280937, P0492-445-00020, W225	L544	Nozzle – 2.0 mm	1
	MB336-225X	280937, P0492-445-00020, W225	L30544	Nozzle – 2.0 mm (10 pack)	10
	PT344-0023	P0492-448-00023	L546	Nozzle – 2.3 mm	1
	PT344-0023X	P0492-448-00023	L30546	Nozzle – 2.3 mm (10 pack)	10
	MB336-226	281791, P0492-446-00025, W226	L545	Nozzle – 2.5 mm	1
	MB336-226X	281791, P0492-446-00025, W226	L30545	Nozzle – 2.5 mm (10 pack)	10
	MB336-0005		L547	Nozzle – 3.0 mm	1
3	MB336-0005X		L30547	Nozzle – 3.0 mm (10 pack)	10
	PT344-0008CP	280013, P0492-441-00008	L400X	Nozzle – 0.8 mm CP	1
	PT344-0008CPX	280013, P0492-441-00008	L30400X	Nozzle – 0.8 mm CP (10 pack)	10
	PT344-0010CP	280014, P0492-442-00010, W223	L401X	Nozzle – 1.0 mm CP	1
	PT344-0010CPX	280014, P0492-442-00010, W223	L30401X	Nozzle – 1.0 mm CP (10 pack)	10
	PT344-0012CP		L402X	Nozzle – 1.2 mm CP	1
	PT344-0012CPX		L30402X	Nozzle – 1.2 mm CP (10 pack)	10
	PT344-0015CP	280016, P0492-444-00015, W224	L403X	Nozzle – 1.5 mm CP	1
	PT344-0015CPX	280016, P0492-444-00015, W224	L30403X	Nozzle – 1.5 mm CP (10 pack)	10
	PT344-0018CP	P0492-447-00018	L543X	Nozzle – 1.8 mm CP	1
	PT344-0018CPX	P0492-447-00018	L30543X	Nozzle – 1.8 mm CP (10 pack)	10
	PT344-0022CP	280937, P0492-445-00020, W225	L544X	Nozzle – 2.0 mm CP	1
	PT344-0022CPX	280937, P0492-445-00020, W225	L30544X	Nozzle – 2.0 mm CP (10 pack)	10
	PT344-0023CP	P0492-448-00023	L546X	Nozzle – 2.3 mm CP	1
	PT344-0023CPX	P0492-448-00023	L30546X	Nozzle – 2.3 mm CP (10 pack)	10
	PT344-0025CP	281791, P0492-446-00025, W226	L545X	Nozzle – 2.5 mm CP	1
	PT344-0025CPX	281791, P0492-446-00025, W226	L30545X	Nozzle – 2.5 mm CP (10 pack)	10
	PT344-0027CP		L547X	Nozzle – 3.0 mm CP	1
	PT344-0027CPX		L30547X	Nozzle – 3.0 mm CP (10 pack)	10



Sensor repairs available in select regions only.

Consumables

Centricut part number	Reference number	Alternate reference	Description	Pkg qty
1 MB999-429A	W429A	461	Sensor repair W429A	1
2 PT999-HNZ	56743300500		Sensor repair HNZ	1
3 PT999-25ZJ	P0361-203-00001		Sensor repair 25ZJ	1
MB999-239	W239		Sensor repair W239	1
4 MB999-SE	P0594-820-00001		Sensor repair	1

Optics

Centricut part number	Reference number	Type	Diameter	Focal length	Edge thickness
-----------------------	------------------	------	----------	--------------	----------------

Lenses

MB312-018	W018	PLX	1.5"	7.5"	.310"
MB312-500	W500	PLX	1.5"	5.0"	.310"
MB312-505	W505	PLX	2.0"	5.0"	.310"
MB312-510	W510	PLX	2.0"	7.5"	.310"

Ultra low absorption lenses

MB312-018 ULA	W018	PLX	1.5"	7.5"	.300"
MB312-505 ULA	W505	PLX	2.0"	5.0"	.310"
MB312-510 ULA	W510	PLX	2.0"	7.5"	.310"

Centricut part number	Reference number	Material	Diameter	Edge thickness	S1
-----------------------	------------------	----------	----------	----------------	----

Phase shift mirrors

MB316-004	R004	SI	2.0"	.200"	
-----------	------	----	------	-------	--

Centricut part number	Reference number	Type	Material	Diameter	Edge thickness	S1
-----------------------	------------------	------	----------	----------	----------------	----

Collimating optics

MB312-250	R250		ZNSE	1.5"	.1575"	11M
MB312-298	R298	MMR	CU	2.36"	.118"	
MB312-1529	W1529	MMR	CU	2.36"	.236"	15MCC
MB312-1528	W1528	MMR	CU	2.36"	.236"	22MCC

Zero phase shift mirrors and total reflectors

MB312-106	R106	TRZ	CU	1.1"	.236"	
MB312-107	R107	TRZ	CU	2.0"	.354"	
MB312-102	W102	ZPS	CU	2.0"	.200"	
MB312-051	R051	ZPS	CU	2.36"	.236"	
MB312-160	R160 & R160A	ZPS	CU	3.0"	.236"	
MB312-644	W644	TRZ	CU	2.36"	.591"	
MB312-643	W643	TRZ	CU	3.0"	.591"	
MB312-9719	219719	TRZ	SI	1.1"	.236"	
MB312-571	R571	TRZ	SI	1.41"	.236"	
MB312-321	R321	TRZ	SI	1.96"	.354"	

New items shown in bold

Optics

Centricut part number	Reference number	Type	Diameter	Focal length	Edge thickness	
Absorbing thin film reflectors (ATFR)						
MB312-8695	Q919D006H01A	ATFR	CU	2.36"	.590"	
Centricut part number	Reference number	Material	Diameter	Edge thickness	S1/Reflectivity	S2
Output couplers						
MB312-259	R259	ZNSE	1.5"	.236"	10MCC-17%	15MCX
MB312-519	R519	ZNSE	1.5"	.236"	10MCC-17%	10MC
MB312-508	R508	ZNSE	1.5"	.236"	10MCC-30%	10MCX
MB312-500R	R500	ZNSE	1.5"	.236"	20MCC-30%	PO/AR
MB312-570	R570	ZNSE	2.0"	0.236	14MCC-17%	20MCX
Rear mirrors						
MB312-003	R003	ZNSE	1.5"	.236"	20MCC-99%	PO/AR
MB312-572	R572	ZNSE	1.5"	.354"	25MCC-99%	

Optics care

Centricut part number	Reference number	Description	Pkg qty
TR300-6452	N/A	CO ₂ Lens paper (50 sheets)	1
TR300-SC20		Cotton swab – 20 piece	1
TR300-1115		Lens cleaning pre-cut cotton –100 piece	1
TR300-1010	AL1010	Dropper, lens cleaning fluid	1
TR300-255	AL255	Loupe, magnifying	1
TR300-271	AL271	Base, lens maintenance	1
TR300-7388	787388	Mirror polish (250 ml)	1

New items shown in bold

Ophir & Centricut by Talas = 100% Kwaliteitsgarantie & 100% OEM compatibiliteitsgarantie.

Talas is exclusief verdeler van o.a. lenzen & spiegels van **Ophir** voor BeLux en nozzles & ceramieken van **Centricut/Hypertherm** waardoor wij zeer competitieve tarieven hebben. Deze fabrikanten zijn tevens ook leverancier van de grootste fabrikanten(OEM) van lasersnijmachines.

Ophir, een CO² Optica groep en tweede grootste leverancier in de wereld is producent van het volledige gamma optieken voor de OEM en de vervangingsmarkt.

Ophir fabriceert lenzen met verschillende coatings voor een lagere absorptie en voor een langere levensduur:

-**Duralens**: max. absorptie $\leq 0,2\%$; standaard gele lens.

-**Black Magic**: max. absorptie $< 0,15\%$; niet transparante, niet-radioactieve harde coating voor een stabielere focuspunt en hogere warmte geleiding, vochtbestendige coating.

-**Clear Magic**: max. absorptie $< 0,13\%$; transparante, harde coating voor de beste focus stabiliteit en hoogste warmtebestendigheid, PMS-compatibel, vochtbestendige coating.

Centricut/Hypertherm nozzles in een kopertellurium legering, vervaardigd op CNC met diamanten werktuigen, gegarandeerd braamloze bewerking, optimale warmteweerstand, constante geleiding, verspanende tolerantie en concentriciteit $< 0,01\text{mm}$, zeer fijn afgewerkt binnenoppervlak voor een goede doorstroming van het gas en buitenafwerking tegen de hechting van de gesmolten materie, verchromde nozzles vermijden hechting van de gesmolten materie, dubbele nozzles voor een betere kwaliteit en hogere snijnelheid voor staal vanaf 8mm, lasermarkering van de diameter.

Ophir & Centricut by Talas = garantie à 100% de qualité et 100% de garantie compatibilité OEM

Talas est le distributeur exclusif de e.a. les lentilles et les miroirs de **Ophir** pour le BeLux et des buses & des céramiques de **Centricut/Hypertherm**. De ce fait nous avons des tarifs très compétitifs. Ces fabricants sont aussi fournisseurs des plus grands fabricants (OEM) des machines de découpe au laser.

Ophir, un groupe d'optique CO² et deuxième fournisseur en importance dans le monde, produit la gamme complète d'optiques pour l'OEM et le marché de pièces de rechange. Ophir fabrique des lentilles avec des revêtements différents pour un taux d'absorption inférieur et une durée de vie plus longue:

-**Duralens**: absorption maximale $\leq 0,2\%$, lentille standard jaune

-**Black Magic**: absorption maximale $< 0,15\%$, non transparent, revêtement dur non radioactifs pour un point focal plus stable et une conductivité thermique plus élevée, revêtement résistant à l'humidité

-**Clear Magic**: absorption maximale $< 0,13\%$, revêtement dur transparent pour la meilleure stabilité du point focal et la meilleure résistance à la chaleur, le revêtement PMS-conforme et résistant à l'humidité

Centricut/Hypertherm: buses dans un alliage cuivre-tellurium usinés avec outils diamant sur tours à CN, usinage garanti sans bavures, excellente résistance thermique, conductivité constante, tolérances d'usinage et de concentricité $< 0,01\text{ mm}$, la surface intérieure finement travaillée pour une bonne fluidité du gaz et une finition extérieure lisse contre l'accrochage de la matière en fusion, buses chromées évitant l'accrochage de la matière en fusion, double buses pour une meilleure qualité et plus grande vitesse de coupe de l'acier de 8 mm, marquage au laser du diamètre.

Type of nozzle & Reasons for selecting

Adapter This means that it is possible to use a different type of nozzle as long as the nozzle adaptor is purchased. It adapts from a big nozzle to a smaller nozzle and this can save the end-user money in the long run.

CP (chrome plated) CP nozzles are plated with chrome for increased durability. Chrome plated nozzles are much easier to clean and can withstand contact with material better than non-plated nozzles.

Conical This refers to the internal geometry of the nozzle. Due to the internal geometry the gas swirls and spirals down towards the material causing a coaxial flow, this flow prevents plugging of the orifice.

Cylindrical This refers to the internal geometry of the nozzle. Mainly used for gauge steel to 6,4 mm low pressure oxygen cutting.

Double Just as it sounds, this is a nozzle within a nozzle. Sometimes referred to as a "jacketed nozzle". Double nozzles are better for cutting thicker materials. "Better" refers to cut quality more than speed. Double nozzles have a high aspect ratio at the exit helping protect lens from back spatter.

Double with holes or double nozzle insert Used with the outer nozzle; the double nozzle insert inserts into the outer nozzle to form a double.

Double hard This is a double nozzle with the hard chrome plating (this type of chrome plating is only available in North America).

Hard Hard chrome plating (only available in North America), is harder than standard chrome therefore it is more durable.

Hex Hex refers to the machined edge of the nozzle, with the hex machined in it makes it possible to get an open end wrench on the nozzle for tightening and loosening.

High pressure (HP) High density (HD) Used in applications where the gas pressures are really high, used on thicker material and stainless steel and aluminium.

Low pressure Used for low pressure oxygen cutting applications such as gauge material up to 3,2 mm.

Nozzle holder The nozzle holder sometimes also known as the ceramic is the mating partner for the nozzle; the two are combined by threading the nozzle into the holder.

Nozzle, long Refers to the length of the nozzle.

Nozzle, short Refers to the length of the nozzle.

Nozzle, w/step This refers to the internal geometry of the nozzle. Mainly used in higher pressure cutting.

Outer nozzle See double nozzle. This is the mating partner of the double nozzle insert, the two combined make a double nozzle.

Shower Used to cut thick mild steel ($> 6,4\text{ mm}$) w/O₂ assist gas. Shower nozzles have a center nozzle orifice, surrounded by several other holes. This design ensures more effective assist gas volume, without significantly increasing real volume.

Straight taper This refers to the internal geometry of the nozzle, mainly used in higher pressure cutting.

WACS Water-assist cutting system.

