

TRUMPF



TruDisk

Technical data

TRUMPF



TruDisk 1000**TruDisk 2000****TruDisk 3001****LASER PARAMETERS**

LASER POWER ON THE WORKPIECE	1000 W	2000 W	3000 W
TYPICAL POWER CONSTANCY AT RATED POWER	± 1 % with active power regulation	± 1 % with active power regulation	± 1 % with active power regulation
CONTINUOUSLY ADJUSTABLE POWER RANGE	60 W - 1000 W with active power regulation	60 W - 2000 W with active power regulation	80 W - 3000 W with active power regulation
BEAM QUALITY AT THE INPUT COUPLING IN THE LLK	2 mm ■ mrad	2 mm ■ mrad	4 mm ■ mrad
NUMERICAL APERTURE ON THE OUTPUT COUPLING AFTER LLK	0.1	0.1	0.1
WAVELENGTH	1030 nm	1030 nm	1030 nm
MINIMUM LASER LIGHT CABLE DIAMETER	50 µm	50 µm	100 µm
TYP. LEISTUNGSKONSTANZ BEI NENNLEISTUNG ÜBER 8 STD. BEI KONSTANTER UMGEBUNGSTEMPERATUR			
MAX. LEISTUNGSKONSTANZ BEI NENNLEISTUNG ÜBER 8 STD. BEI KONSTANTER UMGEBUNGSTEMPERATUR			
TYPICAL POWER CONSTANCY AT RATED POWER OVER 8 HOURS AT CONSTANT AMBIENT TEMPERATURE			

STRUCTURAL DESIGN

WIDTH	1175 mm	1175 mm	1175 mm
HEIGHT	1430 mm	1430 mm	1430 mm
DEPTH	725 mm	725 mm	725 mm
MAXIMUM NUMBER OF LASER LIGHT CABLES	2	2	2
MAXIMUM NUMBER OF LASER LIGHT CABLES FOR EXTENDED DEVICE SIZE	4	4	4

INSTALLATION

PROTECTION CLASS	IP54	IP54	IP54
AMBIENT TEMPERATURE	10 °C - 50 °C	10 °C - 50 °C	10 °C - 50 °C

TruDisk 3001 P**TruDisk 3002****TruDisk 3006****LASER PARAMETERS**

LASER POWER ON THE WORKPIECE	3000 W	3000 W	3000 W
TYPICAL POWER CONSTANCY AT RATED POWER	-	± 1 % with active power regulation	± 1 % with active power regulation
CONTINUOUSLY ADJUSTABLE POWER RANGE	-	80 W - 3000 W with active power regulation	80 W - 3000 W with active power regulation
BEAM QUALITY AT THE INPUT COUPLING IN THE LLK	4 mm ■ mrad	8 mm ■ mrad	25 mm ■ mrad
NUMERICAL APERTURE ON THE OUTPUT COUPLING AFTER LLK	0.1	0.1	0.1
WAVELENGTH	1030 nm	1030 nm	1030 nm

TruDisk 3001 P**TruDisk 3002****TruDisk 3006**

MINIMUM LASER LIGHT CABLE DIAMETER	100 µm	200 µm	600 µm
TYP. LEISTUNGSKONSTANZ BEI NENNLEISTUNG ÜBER 8 STD. BEI KONSTANTER UMGEBUNGSTEMPERATUR	± 1 %		
MAX. LEISTUNGSKONSTANZ BEI NENNLEISTUNG ÜBER 8 STD. BEI KONSTANTER UMGEBUNGSTEMPERATUR	± 2 %		
TYPICAL POWER CONSTANCY AT RATED POWER OVER 8 HOURS AT CONSTANT AMBIENT TEMPERATURE			

STRUCTURAL DESIGN

WIDTH	1175 mm	1175 mm	1175 mm
HEIGHT	1430 mm	1430 mm	1430 mm
DEPTH	725 mm	725 mm	725 mm
MAXIMUM NUMBER OF LASER LIGHT CABLES	1	2	2
MAXIMUM NUMBER OF LASER LIGHT CABLES FOR EXTENDED DEVICE SIZE	-	4	4

INSTALLATION

PROTECTION CLASS	IP54	IP54	IP54
AMBIENT TEMPERATURE	10 °C - 45 °C	10 °C - 50 °C	10 °C - 50 °C

TruDisk 4000**TruDisk 4001****TruDisk 4001 P****LASER PARAMETERS**

LASER POWER ON THE WORKPIECE	4000 W	4000 W	4000 W
TYPICAL POWER CONSTANCY AT RATED POWER	± 1 % with active power regulation	± 1 % with active power regulation	-
CONTINUOUSLY ADJUSTABLE POWER RANGE	80 W - 4000 W with active power regulation	80 W - 4000 W with active power regulation	-
BEAM QUALITY AT THE INPUT COUPLING IN THE LLK	2 mm ■ mrad	4 mm ■ mrad	4 mm ■ mrad
NUMERICAL APERTURE ON THE OUTPUT COUPLING AFTER LLK	0.1	0.1	0.1
WAVELENGTH	1030 nm	1030 nm	1030 nm
MINIMUM LASER LIGHT CABLE DIAMETER	50 µm	100 µm	100 µm
TYP. LEISTUNGSKONSTANZ BEI NENNLEISTUNG ÜBER 8 STD. BEI KONSTANTER UMGEBUNGSTEMPERATUR			± 1 %
MAX. LEISTUNGSKONSTANZ BEI NENNLEISTUNG ÜBER 8 STD. BEI KONSTANTER UMGEBUNGSTEMPERATUR			± 2 %
TYPICAL POWER CONSTANCY AT RATED POWER OVER 8 HOURS AT CONSTANT AMBIENT TEMPERATURE			

TruDisk 4000**TruDisk 4001****TruDisk 4001 P****STRUCTURAL DESIGN**

WIDTH	1175 mm	1175 mm	1175 mm
HEIGHT	1430 mm	1430 mm	1430 mm
DEPTH	725 mm	725 mm	725 mm
MAXIMUM NUMBER OF LASER LIGHT CABLES	2	2	1
MAXIMUM NUMBER OF LASER LIGHT CABLES FOR EXTENDED DEVICE SIZE	4	4	-

INSTALLATION

PROTECTION CLASS	IP54	IP54	IP54
AMBIENT TEMPERATURE	10 °C - 50 °C	10 °C - 50 °C	10 °C - 45 °C

TruDisk 4002**TruDisk 4006****TruDisk 5000****LASER PARAMETERS**

LASER POWER ON THE WORKPIECE	4000 W	4000 W	5000 W
TYPICAL POWER CONSTANCY AT RATED POWER	± 1 % with active power regulation	± 1 % with active power regulation	± 1 % with active power regulation
CONTINUOUSLY ADJUSTABLE POWER RANGE	80 W - 4000 W with active power regulation	80 W - 4000 W with active power regulation	100 W - 5000 W with active power regulation
BEAM QUALITY AT THE INPUT COUPLING IN THE LLK	8 mm ■ mrad	25 mm ■ mrad	2 mm ■ mrad
NUMERICAL APERTURE ON THE OUTPUT COUPLING AFTER LLK	0.1	0.1	0.1
WAVELENGTH	1030 nm	1030 nm	1030 nm
MINIMUM LASER LIGHT CABLE DIAMETER	200 µm	600 µm	50 µm
TYP. LEISTUNGSKONSTANZ BEI NENNLEISTUNG ÜBER 8 STD. BEI KONSTANTER UMGEBUNGSTEMPERATUR			
MAX. LEISTUNGSKONSTANZ BEI NENNLEISTUNG ÜBER 8 STD. BEI KONSTANTER UMGEBUNGSTEMPERATUR			
TYPICAL POWER CONSTANCY AT RATED POWER OVER 8 HOURS AT CONSTANT AMBIENT TEMPERATURE			

STRUCTURAL DESIGN

WIDTH	1175 mm	1175 mm	1175 mm
HEIGHT	1430 mm	1430 mm	1430 mm
DEPTH	725 mm	725 mm	725 mm
MAXIMUM NUMBER OF LASER LIGHT CABLES	2	2	2
MAXIMUM NUMBER OF LASER LIGHT CABLES FOR EXTENDED DEVICE SIZE	4	4	4

INSTALLATION

TruDisk 4002**TruDisk 4006****TruDisk 5000**

PROTECTION CLASS	IP54	IP54	IP54
AMBIENT TEMPERATURE	10 °C - 50 °C	10 °C - 50 °C	10 °C - 50 °C

TruDisk 5001**TruDisk 5002****TruDisk 5006****LASER PARAMETERS**

LASER POWER ON THE WORKPIECE	5000 W	5000 W	5000 W
TYPICAL POWER CONSTANCY AT RATED POWER	± 1 % with active power regulation	± 1 % with active power regulation	± 1 % with active power regulation
CONTINUOUSLY ADJUSTABLE POWER RANGE	120 W - 5000 W with active power regulation	120 W - 5000 W with active power regulation	120 W - 5000 W with active power regulation
BEAM QUALITY AT THE INPUT COUPLING IN THE LLK	4 mm ■ mrad	8 mm ■ mrad	25 mm ■ mrad
NUMERICAL APERTURE ON THE OUTPUT COUPLING AFTER LLK	0.1	0.1	0.1
WAVELENGTH	1030 nm	1030 nm	1030 nm
MINIMUM LASER LIGHT CABLE DIAMETER	100 µm	200 µm	600 µm
TYP. LEISTUNGSKONSTANZ BEI NENNLEISTUNG ÜBER 8 STD. BEI KONSTANTER UMGEBUNGSTEMPERATUR			
MAX. LEISTUNGSKONSTANZ BEI NENNLEISTUNG ÜBER 8 STD. BEI KONSTANTER UMGEBUNGSTEMPERATUR			
TYPICAL POWER CONSTANCY AT RATED POWER OVER 8 HOURS AT CONSTANT AMBIENT TEMPERATURE			

STRUCTURAL DESIGN

WIDTH	1175 mm	1175 mm	1175 mm
HEIGHT	1430 mm	1430 mm	1430 mm
DEPTH	725 mm	725 mm	725 mm
MAXIMUM NUMBER OF LASER LIGHT CABLES	2	2	2
MAXIMUM NUMBER OF LASER LIGHT CABLES FOR EXTENDED DEVICE SIZE	4	4	4

INSTALLATION

PROTECTION CLASS	IP54	IP54	IP54
AMBIENT TEMPERATURE	10 °C - 50 °C	10 °C - 50 °C	10 °C - 50 °C

TruDisk 6000**TruDisk 6001****TruDisk 6001 P****LASER PARAMETERS**

LASER POWER ON THE WORKPIECE	6000 W	6000 W	6000 W
TYPICAL POWER CONSTANCY AT RATED POWER	-	± 1 % with active power regulation	-

TruDisk 6000**TruDisk 6001****TruDisk 6001 P**

CONTINUOUSLY ADJUSTABLE POWER RANGE	120 W - 6000 W with active power regulation	120 W - 6000 W with active power regulation	-
BEAM QUALITY AT THE INPUT COUPLING IN THE LLK	2 mm ■ mrad	4 mm ■ mrad	4 mm ■ mrad
NUMERICAL APERTURE ON THE OUTPUT COUPLING AFTER LLK	0.1	0.1	0.1
WAVELENGTH	1030 nm	1030 nm	1030 nm
MINIMUM LASER LIGHT CABLE DIAMETER	50 µm	100 µm	100 µm
TYP. LEISTUNGSKONSTANZ BEI NENNLEISTUNG ÜBER 8 STD. BEI KONSTANTER UMGEBUNGSTEMPERATUR			± 1 %
MAX. LEISTUNGSKONSTANZ BEI NENNLEISTUNG ÜBER 8 STD. BEI KONSTANTER UMGEBUNGSTEMPERATUR			± 2 %
TYPICAL POWER CONSTANCY AT RATED POWER OVER 8 HOURS AT CONSTANT AMBIENT TEMPERATURE	± 0.5 %		

STRUCTURAL DESIGN

WIDTH	1620 mm	1175 mm	1175 mm
HEIGHT	1475 mm	1430 mm	1430 mm
DEPTH	920 mm	725 mm	725 mm
MAXIMUM NUMBER OF LASER LIGHT CABLES	2	2	1
MAXIMUM NUMBER OF LASER LIGHT CABLES FOR EXTENDED DEVICE SIZE	-	4	-

INSTALLATION

PROTECTION CLASS	IP54	IP54	IP54
AMBIENT TEMPERATURE	10 °C - 50 °C	10 °C - 50 °C	10 °C - 45 °C

TruDisk 6002**TruDisk 6006****TruDisk 8001****LASER PARAMETERS**

LASER POWER ON THE WORKPIECE	6000 W	6000 W	8000 W
TYPICAL POWER CONSTANCY AT RATED POWER	± 1 % with active power regulation	± 1 % with active power regulation	± 1 % with active power regulation
CONTINUOUSLY ADJUSTABLE POWER RANGE	120 W - 6000 W with active power regulation	120 W - 6000 W with active power regulation	160 W with active power regulation
BEAM QUALITY AT THE INPUT COUPLING IN THE LLK	8 mm ■ mrad	25 mm ■ mrad	4 mm ■ mrad
NUMERICAL APERTURE ON THE OUTPUT COUPLING AFTER LLK	0.1	0.1	0.1
WAVELENGTH	1030 nm	1030 nm	1030 nm
MINIMUM LASER LIGHT CABLE DIAMETER	200 µm	600 µm	100 µm
TYP. LEISTUNGSKONSTANZ BEI NENNLEISTUNG ÜBER 8 STD. BEI KONSTANTER UMGEBUNGSTEMPERATUR			

TruDisk 6002**TruDisk 6006****TruDisk 8001**

MAX. LEISTUNGSKONSTANZ BEI
NENNLEISTUNG ÜBER 8 STD. BEI
KONSTANTER
UMGEBUNGSTEMPERATUR

TYPICAL POWER CONSTANCY AT
RATED POWER OVER 8 HOURS AT
CONSTANT AMBIENT
TEMPERATURE

STRUCTURAL DESIGN

WIDTH	1175 mm	1175 mm	1175 mm
HEIGHT	1430 mm	1430 mm	1430 mm
DEPTH	725 mm	725 mm	725 mm
MAXIMUM NUMBER OF LASER LIGHT CABLES	2	2	2
MAXIMUM NUMBER OF LASER LIGHT CABLES FOR EXTENDED DEVICE SIZE	4	4	4

INSTALLATION

PROTECTION CLASS	IP54	IP54	IP54
AMBIENT TEMPERATURE	10 °C - 50 °C	10 °C - 50 °C	10 °C - 50 °C

TruDisk 10001**TruDisk 10002****TruDisk 12001****LASER PARAMETERS**

LASER POWER ON THE WORKPIECE	10000 W	10000 W	12000 W
TYPICAL POWER CONSTANCY AT RATED POWER	± 1 % with active power regulation	± 1 % with active power regulation	± 1 % with active power regulation
CONTINUOUSLY ADJUSTABLE POWER RANGE	200 W - 10000 W with active power regulation	200 W - 10000 W with active power regulation	240 W - 12000 W with active power regulation
BEAM QUALITY AT THE INPUT COUPLING IN THE LLK	4 mm ■ mrad	8 mm ■ mrad	4 mm ■ mrad
NUMERICAL APERTURE ON THE OUTPUT COUPLING AFTER LLK	0.1	0.1	0.1
WAVELENGTH	1030 nm	1030 nm	1030 nm
MINIMUM LASER LIGHT CABLE DIAMETER	100 µm	200 µm	100 µm
TYP. LEISTUNGSKONSTANZ BEI NENNLEISTUNG ÜBER 8 STD. BEI KONSTANTER UMGEBUNGSTEMPERATUR			
MAX. LEISTUNGSKONSTANZ BEI NENNLEISTUNG ÜBER 8 STD. BEI KONSTANTER UMGEBUNGSTEMPERATUR			
TYPICAL POWER CONSTANCY AT RATED POWER OVER 8 HOURS AT CONSTANT AMBIENT TEMPERATURE	± 0.5 %	-	± 0.5 %

STRUCTURAL DESIGN

WIDTH	1620 mm	1990 mm	1620 mm
HEIGHT	1475 mm	1550 mm	1475 mm
DEPTH	920 mm	1200 mm	920 mm

TruDisk 10001**TruDisk 10002****TruDisk 12001**

MAXIMUM NUMBER OF LASER LIGHT CABLES

2

4

2

MAXIMUM NUMBER OF LASER LIGHT CABLES FOR EXTENDED DEVICE SIZE

-

6

-

INSTALLATION

PROTECTION CLASS

IP54

IP54

IP54

AMBIENT TEMPERATURE

10 °C - 50 °C

10 °C - 50 °C

10 °C - 50 °C

TruDisk 16002**TruDisk 16003****LASER PARAMETERS**

LASER POWER ON THE WORKPIECE

16000 W

16000 W

TYPICAL POWER CONSTANCY AT RATED POWER

± 1 % with active power regulation

± 1 % with active power regulation

CONTINUOUSLY ADJUSTABLE POWER RANGE

320 W - 16000 W

320 W - 16000 W

BEAM QUALITY AT THE INPUT COUPLING IN THE LLK

8 mm ■ mrad

12 mm ■ mrad

NUMERICAL APERTURE ON THE OUTPUT COUPLING AFTER LLK

0.1

0.1

WAVELENGTH

1030 nm

1030 nm

MINIMUM LASER LIGHT CABLE DIAMETER

200 µm

300 µm

TYP. LEISTUNGSKONSTANZ BEI NENNLEISTUNG ÜBER 8 STD. BEI KONSTANTER UMGEBUNGSTEMPERATUR

MAX. LEISTUNGSKONSTANZ BEI NENNLEISTUNG ÜBER 8 STD. BEI KONSTANTER UMGEBUNGSTEMPERATUR

TYPICAL POWER CONSTANCY AT RATED POWER OVER 8 HOURS AT CONSTANT AMBIENT TEMPERATURE

STRUCTURAL DESIGN

WIDTH

2800 mm

2800 mm

HEIGHT

1550 mm

1550 mm

DEPTH

1400 mm

1400 mm

MAXIMUM NUMBER OF LASER LIGHT CABLES

6

6

MAXIMUM NUMBER OF LASER LIGHT CABLES FOR EXTENDED DEVICE SIZE

-

-

INSTALLATION

PROTECTION CLASS

IP54

IP54

AMBIENT TEMPERATURE

10 °C - 50 °C

10 °C - 50 °C