

The 40 mm focal length SWIRON is lens with 43.2 mm image field, for SWIR wavelength range. With either C- or V-Mount this lens is extremely robust and insensitive to rough ambient conditions, with the result that the lens retains its high optical imaging performance in industrial environments, as in plastic waste sorting machines.

The secure locking of the iris and focus settings and the SWIR coating of 800 - 1800 nm is standard for this lens. Ideal lens for challenging bio-pharmaceuticals / medical tasks.

More SWIRON lenses: 50 mm focal length high resolution with C-Mount or V-Mount and a 23 mm C-Mount 2/3".



SWIRON 2.8/40

Key features

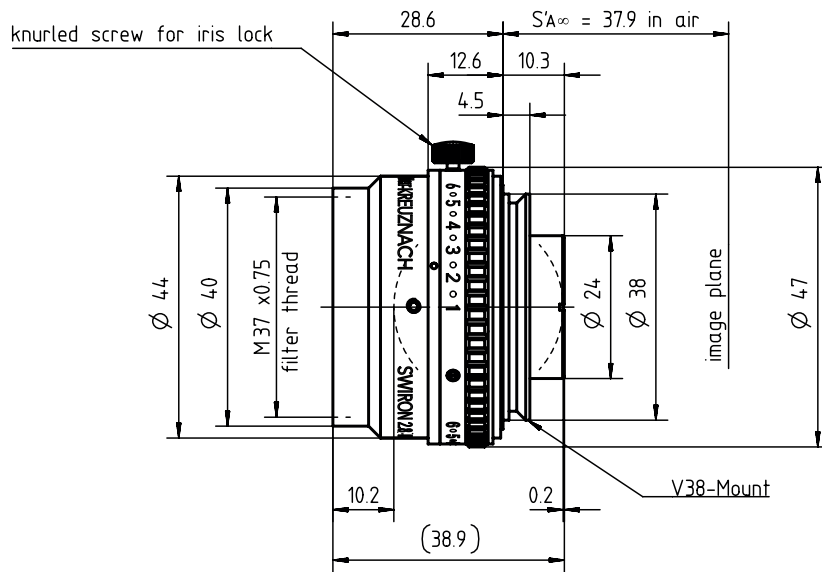
- For up to 43.2 mm image field
- Minimized focal shift
- Distortion less than 1%
- Designed for 800 - 1800 nm

Applications

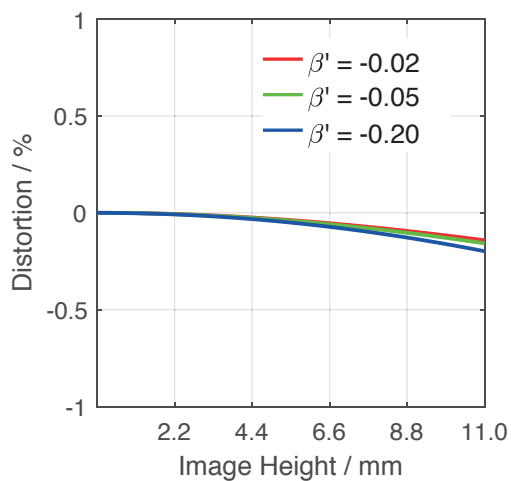
- Bio-pharmaceuticals / medical
- Fluid inspection
- Food control / agriculture
- Plastic waste sorting
- Solar inspection
- LIDAR
- Hyperspectral imaging / material testing

Name	SWIRON 2.8/40
Type	-0015
Focal Length [mm]	40
Magnification	-0.2
Image circle [mm]	43.2
Resolution [μm]	-
F/# range	2.8 ... 16
NA	0.18
Interface	V38-Mount
Working distance [mm]	230
AoV [°]	29
Focus control	manual
Transmission [nm]	800 - 1800
Filter thread [mm]	M37 x 0.75
Dimensions L x D [mm]	39.1 x 47.0

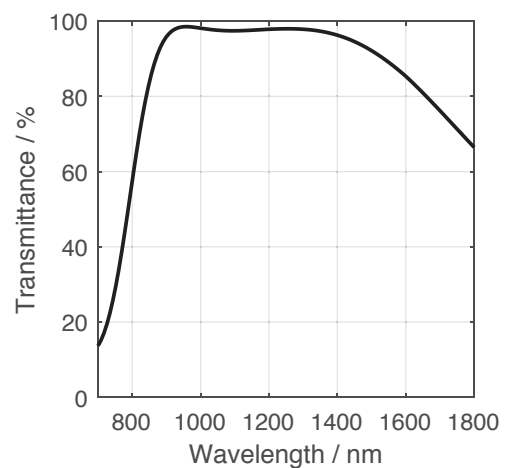
Name	SWIRON 2.8/40
Weight [g]	108
Storage temperature [°C]	-25 ... +70
f'_{eff} [mm]	42.03
S_F [mm]	-25.04
$S'_{F'}$ [mm]	28.38
HH' [mm]	-2.17
β'_P	1.049
S_{EP} [mm]	15.02
S'_{AP} [mm]	-15.72
Σd [mm]	28.47
ID	1063164



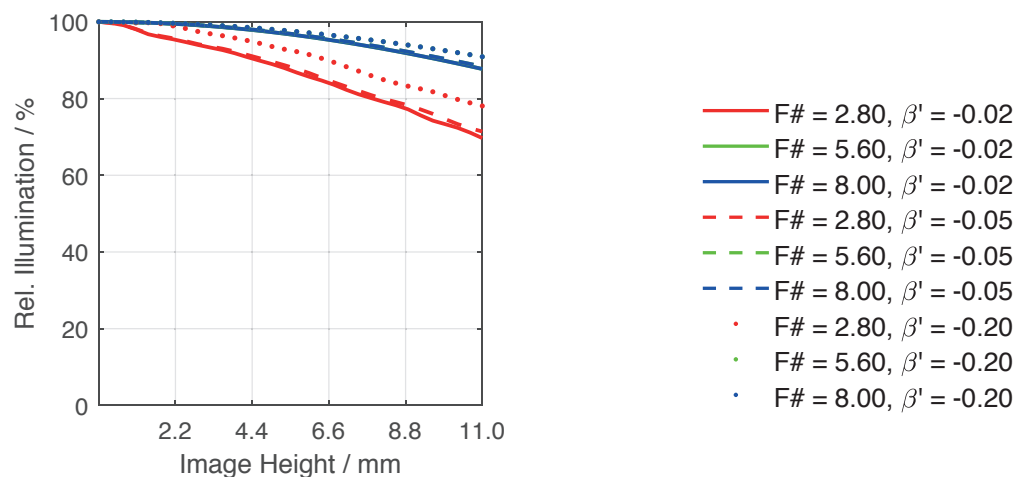
Distortion vs. Image Height



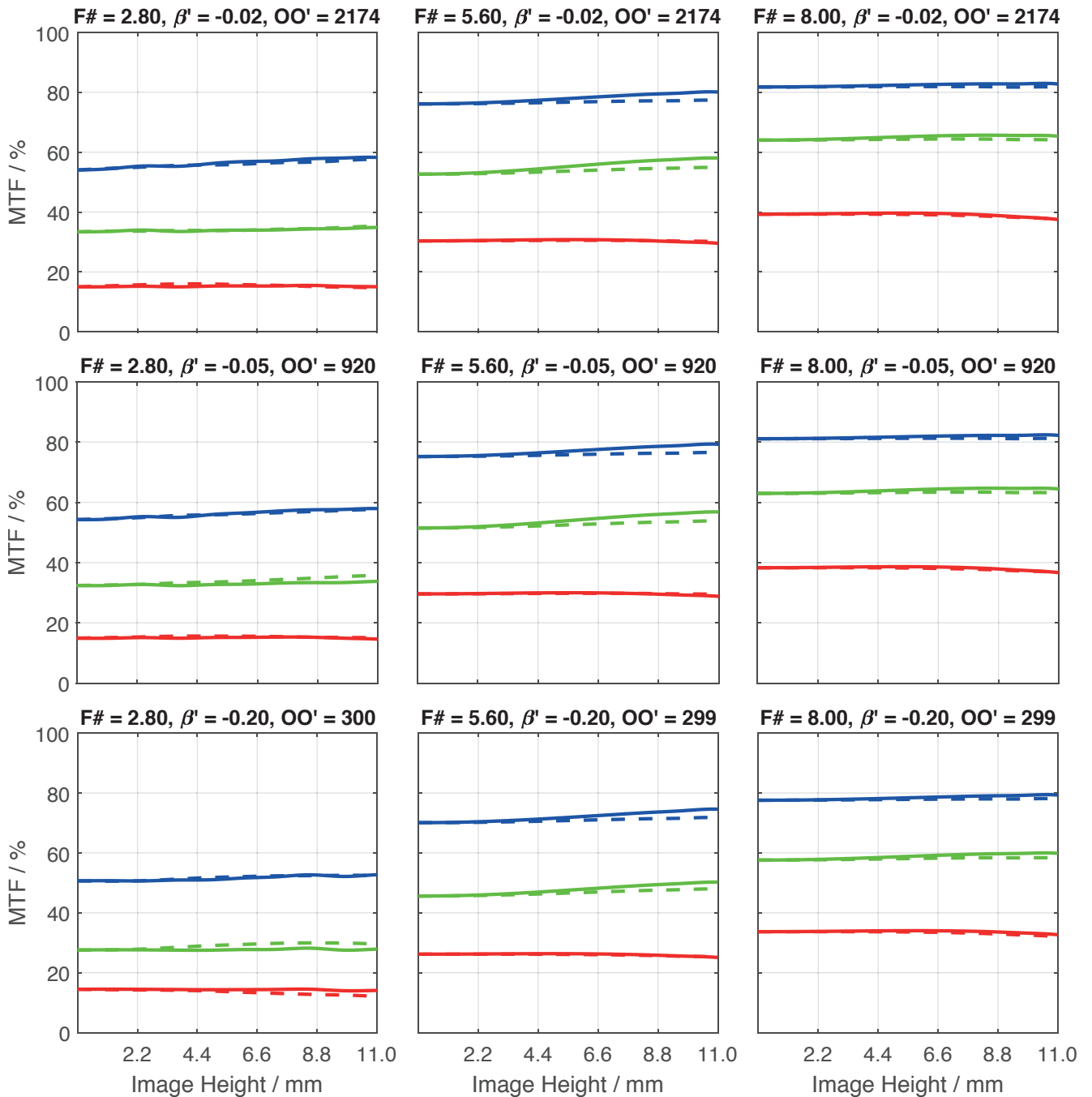
Transmittance vs. Wavelength



Relative Illumination vs. Image Height



Spectrum Name	SWIR					
Wavelengths [nm]	920	1070	1220	1370	1520	1670
Weights	16.9	18.2	17.7	17.1	15.9	14.2



- 9.0 lp/mm, tangential
- 17.0 lp/mm, tangential
- 34.0 lp/mm, tangential
- 9.0 lp/mm, radial
- 17.0 lp/mm, radial
- 34.0 lp/mm, radial

Accessories	Mount	Length	ID
Makro	UNIFOC 12	-	11726
	UNIFOC 7	-	1001041
	UNIFOC 7 (M58 x 0.75)	-	1054532
Ext. Tube	V38 / V38	6 mm	20176
	V38 / V38	8 mm	20177
	V38 / V38	10 mm	20178
	V38 / V38	25 mm	20179
	V38 / V38	50 mm	20154
	V38 / V38	75 mm	20155
Adapter	V38 / C-Mount	-	20052
	V38 / C-Mount Hub V38 / C-Mount	19.2 - 24.2 mm	1011634
	V38 / Leica (M39 x 26 Gg.)	-	20054
	V38 / T2 (M42 x 0.75)	-	20053
	V38 / M42 x 1	-	20059
	V38 / M42 x 1 - Length 35 mm	-	1001692
	V38 / M58 x 0.75	-	1018385
	V38 / Nikon F-Mount	-	21610

Get more information

Contact our local offices



Headquarter Germany

Jos. Schneider Optische Werke GmbH

Ringstraße 132

55543 Bad Kreuznach

☎ +49 671 601 205

✉ cs@schneiderkreuznach.com

www.schneiderkreuznach.com

Offices Worldwide

China

☎ +86 755 8832 1170

✉ shawn.liu@schneider-asiapacific.com

North America

☎ +1 800 645 7239 (East Coast)

☎ +1 800 228 1254 (West Coast)

✉ info@schneideroptics.com

Singapore

☎ +65 9488 0062

✉ thongv@schneiderkreuznach.com