PRODUCTS
2026

Schneider
KREUZNACH

Schneider-Kreuznach Products

Jos. Schneider Optische Werke GmbH is a worldwide acclaimed manufacturer of high performance lenses and filters as well as optical and mechanical components for industrial applications. Schneider-Kreuznach stands for cutting-edge technology engineered in Germany.

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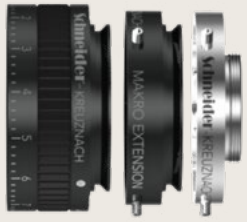
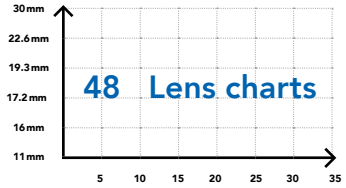


43 Customized Solutions

Lenses

When it comes to optical and precision mechanical components for machine vision, we set the standard. In addition to our extensive standard portfolio of ruggedized lenses, we also provide custom lens solutions for even more ruggedized options. Custom fixed aperture and motorized iris options are also available for many lenses on request.



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TOURMALINE

Maximum performance up to 1.3“

Key Features:

- 1.3“ (24 mm) max. Sensor size
- Resolution down to 2.4µ pixel size
- 8 focal lengths: 16 mm – 50 mm
- Initial aperture: F2 – F2.8
- C-Mount and TFL-Mount available
- Ruggedized version and motorized iris available
- Low chief ray angle suitable for all SONY Pregius™ generations

Typical applications:

- Machine Vision
- AOI (Automated Optical Inspection)
- 3D and 2D measurement
- Traffic and surveillance

Name	Aperture	Focal length (mm)	Mount	Sensor size	Type	Size D x L (mm x mm)	Weight (g)	Filter thread	Code	Datasheet
TOURMALINE 2.8/16 C	2.8–16	16	C	1.3" (24 mm)	standard	39 x 71.1	204	M49 x 0.75 *	1084232	Download
TOURMALINE 2.8/16 TFL	2.8–16	16	TFL	1.3" (24 mm)	standard	39 x 71.1	204	M49 x 0.75 *	1098691	Download
TOURMALINE 2.0/20 C	2.0–16	20	C	1.3" (24 mm)	standard	48 x 62.9	450	M35.5 x 0.5	1056472	Download
TOURMALINE 2.0/20 TFL	2.0–16	20	TFL	1.3" (24 mm)	standard	48 x 62.9	450	M35.5 x 0.5	1098778	Download
NEW TOURMALINE 2.0/20 C-LD	2.8–22	20	C	1.3" (24 mm)	standard	41 x 60.5	154	M34 x 0.5	1107787	Download
NEW TOURMALINE 2.0/20 C-SD	2.8–22	20	C	1.3" (24 mm)	standard	41 x 60.5	154	M34 x 0.5	1107770	Download
TOURMALINE 2.0/24 C	2.0–16	24	C	1.3" (24 mm)	standard	40 x 41.5	120	M37 x 0.75	1071371	Download
TOURMALINE 2.0/24 C-MI	2.0–16	24	C	1.3" (24 mm)	motorized iris	50 x 41.5	164	M37 x 0.75	1076613	Download
TOURMALINE 2.0/24 TFL	2.0–16	24	TFL	1.3" (24 mm)	standard	40 x 41.5	120	M37 x 0.75	1098692	Download
TOURMALINE 2.0/35 C	2.0–22	35	C	1.3" (24 mm)	standard	41 x 55.5	160	M37 x 0.75	1006219	Download
TOURMALINE 2.0/35 C-MI	2.0–22	35	C	1.3" (24 mm)	motorized iris	50 x 55.5	204	M37 x 0.75	1076612	Download
TOURMALINE 2.0/35 TFL	2.0–22	35	TFL	1.3" (24 mm)	standard	41 x 55.5	160	M37 x 0.75	1098690	Download
TOURMALINE 2.8/40 C	2.8–22	40	C	1.3" (24 mm)	standard	34 x 48.3	78	M30.5 x 0.5	1101717	Download
TOURMALINE 4.0/45 C	4.0–22	45	C	1.3" (24 mm)	standard	34 x 51.6	78	M30.5 x 0.5	1101715	Download
TOURMALINE 2.8/50 C	2.8–32	50	C	1.3" (24 mm)	standard	34 x 52.6	135	M30.5 x 0.5	1001976	Download
TOURMALINE 2.8/50 C-R	2.8–32	50	C	1.3" (24 mm)	ruggedized	34 x 52.6	135	M30.5 x 0.5	1062882	Download
TOURMALINE 2.8/50 C-MI	2.8–32	50	C	1.3" (24 mm)	motorized iris	50 x 52.6	179	M30.5 x 0.5	1076168	Download
TOURMALINE 2.8/50 TFL	2.8–32	50	TFL	1.3" (24 mm)	standard	34 x 52.6	135	M30.5 x 0.5	1098689	Download
TOURMALINE 4.0/60 C	4.0–22	60	C	1.3" (24 mm)	standard	34 x 63.2	135	M30.5 x 0.5	1101716	Download

*Optional filter adapter is required

AQUAMARINE

The budget solution for up to 1.3“

Key Features:

- 1.3“ (24 mm) max. Sensor size
- 2 focal lengths: 28 mm and 35 mm
- Initial aperture: F2
- C-Mount and TFL-Mount available
- Ruggedized version and motorized iris available for 28 mm lens

Typical applications:

- Machine Vision
- AOI (Automated Optical Inspection)
- 3D and 2D measurement
- Traffic and surveillance

Name	Aperture	Focal length (mm)	Mount	Sensor size	Type	Size D x L (mm x mm)	Weight (g)	Filter thread	Code	Datasheet
AQUAMARINE 2.0/28 C	2.0–16	28	C	1.3" (24 mm)	standard	34 x 38.3	78	M30.5 x 0.5	1001972	Download
AQUAMARINE 2.0/28 C-R	2.0–16	28	C	1.3" (24 mm)	ruggedized	34 x 38.3	78	M30.5 x 0.5	1062857	Download
AQUAMARINE 2.0/28 C-MI	2.0–16	28	C	1.3" (24 mm)	motorized iris	50 x 38.3	122	M30.5 x 0.5	1061456	Download
AQUAMARINE 2.0/28 TFL	2.0–16	28	TFL	1.3" (24 mm)	standard	34 x 38.3	85	M30.5 x 0.5	1098688	Download
AQUAMARINE 2.0/35 C	2.0–16	35	C	1.3" (24 mm)	standard	34 x 44.6	90	M30.5 x 0.5	1075451	Download
AQUAMARINE 2.0/35 TFL	2.0–16	35	TFL	1.3" (24 mm)	standard	34 x 44.6	90	M30.5 x 0.5	1098687	Download

JADE

The new machine vision standard for up to 1.2“

Key Features:

- 1.2“ (19.3 mm) max. Sensor size
- 5 focal lengths: 12 mm – 50 mm
- Initial aperture: F2.8
- C-Mount / ruggedized versions available
- Very high resolution down to 2.4µ pixel size
- Low chief ray angle suitable for all SONY Pregius™ generations

Typical applications:

- Machine Vision
- AOI (Automated Optical Inspection)
- 3D and 2D measurement
- Robotic Vision

Name	Aperture	Focal length (mm)	Mount	Sensor size	Type	Size D x L (mm x mm)	Weight (g)	Filter thread	Code	Datasheet
JADE 2.8/12 C	2.8–22	12	C	1.2" (19.3 mm)	standard	50 x 57.8	167	M62 x 0.75 *	1099612	Download
NEW JADE 2.8/12 C-R	2.8–22	12	C	1.2" (19.3 mm)	ruggedized	50 x 57.8	167	M62 x 0.75 *	1113248	Download
JADE 2.8/16 C	2.8–22	16	C	1.2" (19.3 mm)	standard	40 x 57.5	154	M37 x 0.75	1099214	Download
NEW JADE 2.8/16 C-R	2.8–22	16	C	1.2" (19.3 mm)	ruggedized	40 x 57.5	154	M37 x 0.75	1111210	Download
JADE 2.8/25 C	2.8–16	25	C	1.2" (19.3 mm)	standard	34 x 36.4	76	M30.5 x 0.5	1098480	Download
NEW JADE 2.8/25 C-R	2.8–16	25	C	1.2" (19.3 mm)	ruggedized	34 x 36.4	76	M30.5 x 0.5	1113244	Download
JADE 2.8/35 C	2.8–22	35	C	1.2" (19.3 mm)	standard	34 x 40.8	124	M30.5 x 0.5	1098000	Download
NEW JADE 2.8/35 C-R	2.8–22	35	C	1.2" (19.3 mm)	ruggedized	34 x 40.8	124	M30.5 x 0.5	1107700	Download
JADE 2.8/50 C	2.8–22	50	C	1.2" (19.3 mm)	standard	34 x 58	169	M30.5 x 0.5	1098905	Download
NEW JADE 2.8/50 C-R	2.8–22	50	C	1.2" (19.3 mm)	ruggedized	34 x 58	169	M30.5 x 0.5	1113037	Download

*Optional filter adapter is required

TOPAZ

The specialists for long working distances

Key Features:

- 1.2" (19.3 mm) max. Sensor size (TOPAZ 2.4/6.5: 1.1")
- 6 focal lengths available: 6.5 mm – 50 mm
- Initial aperture: F2 – F2.8 I Motorized iris available
- C-Mount / ruggedized versions available
- Optimized for long working distances up to infinity
- Low chief ray angle suitable for all SONY Pregius™ generations

Typical applications:

- Traffic
- Surveillance
- Long distance imaging

Name	Aperture	Focal length (mm)	Mount	Sensor size	Type	Size D x L (mm x mm)	Weight (g)	Filter thread	Code	Datasheet
TOPAZ 2.4/6.5 C	2.4–16	6.5	C	1.1" (17.6 mm)	standard	55 x 50.2	165	M82 x 0.75 *	1088899	Download
TOPAZ 2.4/6.5 C-MI	2.4–16	6.5	C	1.1" (17.6 mm)	motorized iris	55 x 50.2	225	M82 x 0.75 *	1100923	Download
NEW TOPAZ 2.4/6.5 C-R	2.4–16	6.5	C	1.1" (17.6 mm)	ruggedized	55 x 50.2	165	M82 x 0.75 *	1106916	Download
TOPAZ 2.8/12 C	2.8–22	12	C	1.2" (19.3 mm)	standard	50 x 58	167	M62 x 0.75 *	1103137	Download
NEW TOPAZ 2.8/12 C-R	2.8–22	12	C	1.2" (19.3 mm)	ruggedized	50 x 58	167	M62 x 0.75 *	1113245	Download
TOPAZ 2.0/25 C	2.0–16	25	C	1.2" (19.3 mm)	standard	34 x 40.2	86	M30.5 x 0.5	1081347	Download
TOPAZ 2.0/25 C-MI	2.0–16	25	C	1.2" (19.3 mm)	motorized iris	50 x 40.2	146	M30.5 x 0.5	1088585	Download
NEW TOPAZ 2.0/25 C-R	2.0–16	25	C	1.2" (19.3 mm)	ruggedized	34 x 40.2	86	M30.5 x 0.5	1112174	Download
TOPAZ 2.0/30 C	2.0–16	30	C	1.2" (19.3 mm)	standard	34 x 40.5	87	M30.5 x 0.5	1078946	Download
TOPAZ 2.0/30 C-MI	2.0–16	30	C	1.2" (19.3 mm)	motorized iris	50 x 40.5	147	M30.5 x 0.5	1084646	Download
NEW TOPAZ 2.0/30 C-R	2.0–16	30	C	1.2" (19.3 mm)	ruggedized	34 x 40.5	87	M30.5 x 0.5	1113247	Download
TOPAZ 2.0/38 C	2.0–16	38	C	1.2" (19.3 mm)	standard	34 x 48	133	M30.5 x 0.5	1076930	Download
TOPAZ 2.0/38 C-MI	2.0–16	38	C	1.2" (19.3 mm)	motorized iris	50 x 48	193	M30.5 x 0.5	1084666	Download
NEW TOPAZ 2.0/38 C-R	2.0–16	38	C	1.2" (19.3 mm)	ruggedized	34 x 48	133	M30.5 x 0.5	1105683	Download
TOPAZ 2.0/50 C	2.0–16	50	C	1.2" (19.3 mm)	standard	34 x 56.6	156	M30.5 x 0.5	1079220	Download
TOPAZ 2.0/50 C-MI	2.0–16	50	C	1.2" (19.3 mm)	motorized iris	50 x 56.6	216	M30.5 x 0.5	1084649	Download
NEW TOPAZ 2.0/50 C-R	2.0–16	50	C	1.2" (19.3 mm)	ruggedized	34 x 56.6	156	M30.5 x 0.5	1103149	Download

*Optional filter adapter is required

OPAL

Maximum performance for up to 1.1“

Key Features:

- 1.1“ (17.6 mm) max. Sensor size
- Focal length: 12 mm
- Initial aperture: F2.8
- C-Mount
- Very high resolution down to 2.4µ pixel size
- Low chief ray angle suitable for all SONY Pregius™ generations

Typical applications:

- Machine Vision
- AOI (Automated Optical Inspection)
- 3D and 2D measurement
- Robotic Vision

Name	Aperture	Focal length (mm)	Mount	Sensor size	Type	Size D x L (mm x mm)	Weight (g)	Filter thread	Code	Datasheet
OPAL 2.8/12 C	2.8–22	12	C	1.1" (17.6 mm)	standard	42 x 57.3	145	M40.5 x 0.5	1110511	Download

TURQUOISE

The established standard for up to 1“

Key Features:

- 1“ (16 mm) max. Sensor size
- 3 focal lengths: 10 mm, 16 mm and 70 mm
- Initial aperture: F1.8 – F2.2
- C-Mount
- Ruggedized version and motorized iris available

Typical applications:

- 2D/3D metrology
- Robotics vision
- Industrial automation
- Traffic and surveillance

Name	Aperture	Focal length (mm)	Mount	Sensor size	Type	Size D x L (mm x mm)	Weight (g)	Filter thread	Code	Datasheet
TURQUOISE 1.9/10 C	1.9–16	10	C	1" (16 mm)	standard	37.3 x 50.2	136	M62 x 0.75 *	1001978	Download
TURQUOISE 1.9/10 C-R	1.9–16	10	C	1" (16 mm)	ruggedized	37.3 x 50.2	136	M62 x 0.75 *	1060005	Download
TURQUOISE 1.9/10 C-MI	1.9–16	10	C	1" (16 mm)	motorized iris	50 x 50.2	180	M62 x 0.75 *	1061374	Download
TURQUOISE 1.8/16 C	1.8–11	16	C	1" (16 mm)	standard	34 x 44.7	102	M30.5 x 0.5	1001482	Download
TURQUOISE 1.8/16 C-R	1.8–11	16	C	1" (16 mm)	ruggedized	34 x 44.7	102	M30.5 x 0.5	1058928	Download
TURQUOISE 1.8/16 C-MI	1.8–11	16	C	1" (16 mm)	motorized iris	50 x 44.7	146	M30.5 x 0.5	1061375	Download
TURQUOISE 2.2/70 C	2.2–32	70	C	1" (16 mm)	standard	42 x 77.8	200	M40.5 x 0.5	1014593	Download
TURQUOISE 2.2/70 C-R	2.2–32	70	C	1" (16 mm)	ruggedized	42 x 77.8	200	M40.5 x 0.5	1062874	Download
TURQUOISE 2.2/70 C-MI	2.2–32	70	C	1" (16 mm)	motorized iris	50 x 77.8	244	M40.5 x 0.5	1061457	Download

*Optional filter adapter is required

CITRINE

The established standard for up to 2/3"

Key Features:

- 2/3" (11 mm) max. Sensor size
- 6 focal lengths: 4.8 mm – 35 mm
- Initial apertures: F1.4 – F1.9
- C-Mount
- Ruggedized and stabilized versions and motorized iris available

Typical applications:

- 2D/3D metrology
- Robotics vision
- Industrial automation
- Traffic and surveillance

*Optional filter adapter is required

Name	Aperture	Focal length (mm)	Mount	Sensor size	Type	Size D x L (mm x mm)	Weight (g)	Filter thread	Code	Datasheet
CITRINE 1.8/4.8 C	1.8–11	4.8	C	2/3" (11 mm)	standard	37.3 x 44.5	105	M62 x 0.75 *	1001955	Download
CITRINE 1.8/4.8 C-R	1.8–11	4.8	C	2/3" (11 mm)	ruggedized	37.3 x 44.5	105	M62 x 0.75 *	1058930	Download
CITRINE 1.8/4.8 C-S	1.8–11	4.8	C	2/3" (11 mm)	stabilized	37.3 x 44.5	105	M62 x 0.75 *	1062311	Download
CITRINE 1.8/4.8 C-MI	1.8–11	4.8	C	2/3" (11 mm)	motorized iris	50 x 44.5	149	M62 x 0.75 *	1061448	Download
CITRINE 1.4/8 C	1.4–11	8	C	2/3" (11 mm)	standard	34 x 37.5	90	M30.5 x 0.5	1001919	Download
CITRINE 1.4/8 C-R	1.4–11	8	C	2/3" (11 mm)	ruggedized	34 x 37.5	90	M30.5 x 0.5	1062858	Download
CITRINE 1.4/8 C-S	1.4–11	8	C	2/3" (11 mm)	stabilized	34 x 37.5	90	M30.5 x 0.5	1068951	Download
CITRINE 1.4/8 C-MI	1.4–11	8	C	2/3" (11 mm)	motorized iris	50 x 37.5	134	M30.5 x 0.5	1061449	Download
CITRINE 1.4/12 C	1.4–11	12	C	2/3" (11 mm)	standard	34 x 48.5	99	M30.5 x 0.5	1001951	Download
CITRINE 1.4/12 C-R	1.4–11	12	C	2/3" (11 mm)	ruggedized	34 x 48.5	99	M30.5 x 0.5	1062859	Download
CITRINE 1.4/12 C-S	1.4–11	12	C	2/3" (11 mm)	stabilized	34 x 48.5	99	M30.5 x 0.5	1070118	Download
CITRINE 1.4/12 C-MI	1.4–11	12	C	2/3" (11 mm)	motorized iris	50 x 48.5	143	M30.5 x 0.5	1061450	Download
CITRINE 1.4/17 C	1.4–11	17	C	2/3" (11 mm)	standard	34 x 37.7	85	M30.5 x 0.5	1001957	Download
CITRINE 1.4/17 C-R	1.4–11	17	C	2/3" (11 mm)	ruggedized	34 x 37.7	85	M30.5 x 0.5	1062860	Download
CITRINE 1.4/17 C-S	1.4–11	17	C	2/3" (11 mm)	stabilized	34 x 37.7	85	M30.5 x 0.5	1070117	Download
CITRINE 1.4/17 C-MI	1.4–11	17	C	2/3" (11 mm)	motorized iris	50 x 37.7	129	M30.5 x 0.5	1061451	Download
CITRINE 1.4/23 C	1.4–11	23	C	2/3" (11 mm)	standard	34 x 40.6	95	M30.5 x 0.5	1001917	Download
CITRINE 1.4/23 C-R	1.4–11	23	C	2/3" (11 mm)	ruggedized	34 x 40.6	95	M30.5 x 0.5	1062871	Download
CITRINE 1.4/23 C-MI	1.4–11	23	C	2/3" (11 mm)	motorized iris	50 x 40.6	139	M30.5 x 0.5	1061452	Download
CITRINE 1.9/35 C	1.9–16	35	C	2/3" (11 mm)	standard	34 x 38.5	92	M30.5 x 0.5	1001960	Download
CITRINE 1.9/35 C-R	1.9–16	35	C	2/3" (11 mm)	ruggedized	34 x 38.5	92	M30.5 x 0.5	1062872	Download
CITRINE 1.9/35 C-MI	1.9–16	35	C	2/3" (11 mm)	motorized iris	50 x 38.5	136	M30.5 x 0.5	1061453	Download

ONYX

Fast and perfect for low light and high speed applications

Key Features:

- 1“ (16 mm) max. Sensor size
- Focal length: 25 mm
- Extremely fast lens with F0.95
- C-Mount

Typical applications:

- Bioluminescence
- Fluorescence
- High speed imaging
- Low light applications

Name	Aperture	Focal length (mm)	Mount	Sensor size	Type	Size D x L (mm x mm)	Weight (g)	Filter thread	Code	Datasheet
ONYX 0.95/25 C	0.95–11	25	C	1" (16 mm)	standard	49 x 48.6	240	M39 x 0.5	12101	Download
ONYX 0.95/25 C-FI	0.95 fixed	25	C	1" (16 mm)	standard	48 x 48.6	155	M39 x 0.5	1106958	Download

SYLVINE

Bilateral telecentricity at its best

Key Features:

- 2/3" (11 mm) max. Sensor size
- Very high resolution down to 2.4µ pixel size
- 5 magnifications available: 0.2x – 1x
- C-Mount
- Bilateral telecentric design

Typical applications:

- High precision measurement
- Tube inspection
- Jewel inspection
- Micro defect detection

Name	Aperture	Focal length (mm)	Mount	Sensor size	Type	Size D x L (mm x mm)	Weight (g)	Filter thread	Code	Datasheet
SYLVINE 0.14/1.0x C	0.14	1.0x	C	2/3" (11 mm)	standard	82 x 223.8	1490	M58 x 0.75	35850	Download
SYLVINE 0.07/0.5x C	0.07	0.5x	C	2/3" (11 mm)	standard	82 x 267.7	2150	M58 x 0.75	35851	Download
SYLVINE 0.05/0.33x C	0.05	0.33x	C	2/3" (11 mm)	standard	82 x 228	1600	M58 x 0.75	35852	Download
SYLVINE 0.03/0.25x C	0.03	0.25x	C	2/3" (11 mm)	standard	82 x 253.8	2000	M62 x 0.75	35853	Download
SYLVINE 0.03/0.2x C	0.03	0.2x	C	2/3" (11 mm)	standard	88 x 289.4	2600	M77 x 0.75	35854	Download

CHAROITE

The standard SWIR lens for 2/3“

Key Features:

- 2/3“ (11 mm) max. Sensor size
- Focal length: 23 mm
- Initial aperture: F1.4
- C-Mount
- SWIR (800–1800 nm) optimized

Typical applications:

- Solar cell inspection
- Food sorting
- Agriculture observation
- Geology analysis

Name	Aperture	Focal length (mm)	Mount	Sensor size	Type	Size D x L (mm x mm)	Weight (g)	Filter thread	Code	Datasheet
CHAROITE 1.4/23 C	1.4–11	23	C	2/3" (11 mm)	standard	34 x 40.6	95	M30.5 x 0.5	1063163	Download

CUPRITE

The benchmark for SWIR

Key Features:

- 25 mm max. Sensor size
- Focal length: 50 mm
- Very high resolution down to 5µ pixel size
- Initial aperture: F2.8
- C-Mount and V48-Mount available
- SWIR (800–1800 nm) optimized

Typical applications:

- Solar cell inspection
- Food sorting
- Agriculture observation
- Geology analysis

Name	Aperture	Focal length (mm)	Mount	Sensor size	Type	Size D x L (mm x mm)	Weight (g)	Filter thread	Code	Datasheet
CUPRITE 2.8/50 V48	2.8–16	50	V48	25.4 mm	standard	55 x 60.4	297	M43 x 0.75	1087723	Download
CUPRITE 2.8/50 C	2.8–16	50	C	25.4 mm	standard	56 x 69.8	418	M43 x 0.75	1088501	Download

CRYOLITE

The flexible SWIR solution

Key Features:

- 43.2 mm max. Sensor size
- Focal length: 40 mm
- Initial aperture: F2.8
- Compatible to the V38-Mount System
- SWIR (800–1800 nm) optimized

Typical applications:

- Solar cell inspection
- Food sorting
- Agriculture observation
- Geology analysis

Name	Aperture	Focal length (mm)	Mount	Sensor size	Type	Size D x L (mm x mm)	Weight (g)	Filter thread	Code	Datasheet
CRYOLITE 2.8/40 V38	2.8–16	40	V38	43.2 mm	standard	47 x 38.9	108	M37 x 0.75	1063164	Download

CHROMITE

VIS/NIR/SWIR in one single focus

Key Features:

- 1/1.4" (11.4 mm) max. sensor size
- For pixel size down to 3.4 µm
- Suitable for Sony IMX 99x sensors
- VIS/NIR/SWIR corrected without refocusing
- Initial aperture F2.8, focal length 12 mm
- Compact and robust C-Mount design

Typical applications:

- Hyperspectral Imaging
- Food inspection
- Recycling
- Security

Name	Aperture	Focal length (mm)	Mount	Sensor size	Type	Size D x L (mm x mm)	Weight (g)	Filter thread	Code	Datasheet
NEW CHROMITE 2.8/12 C	2.8–22	12	C	1/1.4" (11.4 mm)	standard	35.5 x 43.8	105	M30.5 x 0.5	1109351	Download

THULITE

High performance for sensors up to 2“

Key Features:

- 2" (32 mm) max. Sensor size
- 3 focal lengths: 35 mm, 50 mm, 75 mm
- Very high resolution down to 2.4µ pixel size
- Initial aperture: F2.8
- M42 and TFL-Mount available
- Covering a wide working distance range

Typical applications:

- Machine Vision
- AOI (Automated Optical Inspection)
- 3D and 2D measurement
- Robotic Vision

Name	Aperture	Focal length (mm)	Mount	Sensor size	Type	Size D x L (mm x mm)	Weight (g)	Filter thread	Code	Datasheet
THULITE 2.8/35 M42X0.75	2.8	35	M42x0.75	2" (32 mm)	standard	56 x 41.6	209	M43 x 0.75	1101847	Download
THULITE 2.8/35 M42X1	2.8	35	M42x1	2" (32 mm)	standard	56 x 41.6	209	M43 x 0.75	1101848	Download
THULITE 2.8/35 TFL	2.8	35	TFL	2" (32 mm)	standard	56 x 41.3	211	M43 x 0.75	1101846	Download
THULITE 2.8/50 M42X0.75-LD	2.8	50	M42x0.75	2" (32 mm)	standard	56 x 62	345	M43 x 0.75	1101279	Download
THULITE 2.8/50 M42X0.75-SD	2.8	50	M42x0.75	2" (32 mm)	standard	56 x 61.8	345	M43 x 0.75	1101280	Download
THULITE 2.8/50 M42X1-LD	2.8	50	M42x1	2" (32 mm)	standard	56 x 62	345	M43 x 0.75	1101281	Download
THULITE 2.8/50 M42X1-SD	2.8	50	M42x1	2" (32 mm)	standard	56 x 61.8	345	M43 x 0.75	1101282	Download
THULITE 2.8/50 TFL-LD	2.8	50	TFL	2" (32 mm)	standard	56 x 64.5	358	M43 x 0.75	1101276	Download
THULITE 2.8/50 TFL-SD	2.8	50	TFL	2" (32 mm)	standard	56 x 64.3	358	M43 x 0.75	1101277	Download
THULITE 2.8/75 M42X0.75-LD	2.8	75	M42x0.75	2" (32 mm)	standard	56 x 85	430	M46 x 0.75	1101707	Download
THULITE 2.8/75 M42X0.75-SD	2.8	75	M42x0.75	2" (32 mm)	standard	56 x 84.7	430	M46 x 0.75	1101708	Download
THULITE 2.8/75 M42X1-LD	2.8	75	M42x1	2" (32 mm)	standard	56 x 85	430	M46 x 0.75	1101709	Download
THULITE 2.8/75 M42X1-SD	2.8	75	M42x1	2" (32 mm)	standard	56 x 84.7	430	M46 x 0.75	1101710	Download
THULITE 2.8/75 TFL-LD	2.8	75	TFL	2" (32 mm)	standard	56 x 87.5	443	M46 x 0.75	1101705	Download
THULITE 2.8/75 TFL-SD	2.8	75	TFL	2" (32 mm)	standard	56 x 87.1	443	M46 x 0.75	1101706	Download

EMERALD

The standard for large sensors

Key Features:

- Image circle: 43.2 mm – 90 mm
- 5 focal lengths: 28 mm – 135 mm
- Initial apertures: F2.2 – F5.6
- F-Mount and V48-Mount available
- Covering a wide working distance range

Typical applications:

- Machine Vision
- AOI (Automated Optical Inspection)
- Web inspection
- Factory automation

Name	Aperture	Focal length (mm)	Mount	Sensor size	Type	Size D x L (mm x mm)	Weight (g)	Filter thread	Code	Datasheet
EMERALD 2.8/28 F-SD	2.8–22	28	F	43.2 mm	standard	65 x 99.1	517	M62 x 0.75	1071609	Download
EMERALD 2.8/28 V48-SD	2.8–22	28	V48	43.2 mm	standard	65 x 99.1	523	M62 x 0.75	1071611	Download
EMERALD 2.8/28 F-LD	2.8–22	28	F	43.2 mm	standard	65 x 98.7	510	M62 x 0.75	1071606	Download
EMERALD 2.8/28 V48-LD	2.8–22	28	V48	43.2 mm	standard	65 x 98.7	522	M62 x 0.75	1071610	Download
EMERALD 2.2/50 F	2.2–16	50	F	43.2 mm	standard	59.6 x 43.2	196	M43 x 0.75	1062672	Download
EMERALD 2.2/50 V48	2.2–16	50	V48	43.2 mm	standard	55 x 43.2	202	M43 x 0.75	1070074	Download
EMERALD 4.0/60 F	4.0–16	60	F	62.5 mm	standard	59.6 x 43.2	262	M43 x 0.75	1085115	Download
EMERALD 4.0/60 V48	4.0–16	60	V48	62.5 mm	standard	55 x 43.2	197	M43 x 0.75	1086887	Download
EMERALD 4.0/80 F	4.0–16	80	F	43.2 mm	standard	59.6 x 62.6	439	M43 x 0.75	1085723	Download
EMERALD 4.0/80 V48	4.0–16	80	V48	82 mm	standard	55 x 43.2	204	M43 x 0.75	1086888	Download
EMERALD 2.8/100 F-SD	2.8–22	100	F	43.2 mm	standard	60 x 98.2	441	M43 x 0.75	1064881	Download
EMERALD 2.8/100 V48-SD	2.8–22	100	V48	43.2 mm	standard	55 x 68.4	317	M43 x 0.75	1070119	Download
EMERALD 2.9/100 F-LD	2.9–22	100	F	43.2 mm	standard	60 x 101	442	M43 x 0.75	1070506	Download
EMERALD 2.9/100 V48-LD	2.9–22	100	V48	43.2 mm	standard	55 x 68.4	318	M43 x 0.75	1073834	Download
EMERALD 5.6/135 V48	5.6–22	135	V48	90 mm	standard	55 x 63	t.b.d.	M49 x 0.75	1104199	Download

TITANITE

Specially developed for light sheet microscopy

Key Features:

- Extremely high resolution down to 2.8 µm pixel size
- Very large image circle of 82 mm
- Optimized for 5x magnification
- Suitable for line and array sensors
- Interchangeable steel dipping caps
- V-Mount for easy installation

Typical applications:

- Light sheet microscopy
- ExA-SPIM
- Large field microscopy

Name	Numerical aperture	Magn.	Mount	Sensor Size (mm)	Type	Size D x L (mm x mm)	Weight (g)	Code	Datasheet
TITANITE 5.0x / NA0.27	0.27	5.0x	V110	82 mm	on request	117 x 245	3460	On request	Download

PYRITE

The universal lens solution – Image circle 30 mm–100 mm

Key Features:

- 11 focal lengths: 28 mm – 120 mm
- Initial apertures: F2.8 – F5.6
- Lenses for specific magnifications available
- V38-Mount, compatible to the V38 mounting system
- Very low distortion and high resolution
- Covering a wide working distance range
- Small and compact design

Typical applications:

- Machine Vision
- AOI (Automated Optical Inspection)
- FPD/PCB inspection
- Logistics

Name	Aperture	Focal length (mm)	Mount	Sensor size	Type	Size D x L (mm x mm)	Weight (g)	Filter thread	Code	Datasheet
PYRITE 2.8/28 V38	2.8–16	28	V38	30	standard	46 x 33.9	99	M37 x 0.75	1097781	Download
PYRITE 2.8/35 V38	2.8–22	35	V38	30	standard	46 x 36.5	108	M37 x 0.75	1097782	Download
PYRITE 2.8/40 V38	2.8–22	40	V38	43.2	standard	46 x 39	102	M37 x 0.75	1097232	Download
PYRITE 4.0/45 V38	4.0–32	45	V38	43.2	standard	46 x 36.5	94	M37 x 0.75	1097783	Download
PYRITE 2.8/50 V38	2.8–32	50	V38	43.2	standard	46 x 39.3	107	M37 x 0.75	1097301	Download
PYRITE 4.0/60 V38	4.0–32	60	V38	62.5	standard	46 x 41.8	114	M37 x 0.75	1097302	Download
PYRITE 4.0/80 V38	4.0–45	80	V38	82	standard	46 x 42	109	M37 x 0.75	1097276	Download
PYRITE 5.6/80/1.0x V38	5.6–45	80	V38	100	standard	46 x 47	130	M37 x 0.75	1097785	Download
PYRITE 4.5/85/0.5x-2.0x V38	4.5–8	85	V38	62.5	standard	48.5 x 48	270	M37 x 0.75	1072517	Download
PYRITE 4.5/90 V38	4.5–64	90	V38	90	standard	46 x 48	134	M37 x 0.75	1097789	Download
PYRITE 4.5/90/0.3x V38	4.5–64	90	V38	90	standard	46 x 52	129	M40.5 x 0.5	1097784	Download
PYRITE 5.6/100 V38	5.6–64	100	V38	100	standard	46 x 40	174	M37 x 0.75	1097303	Download
PYRITE 5.6/120/1.0x V38	5.6–64	120	V38	90	standard	46 x 54.7	164	M40.5 x 0.5	1097277	Download
PYRITE 5.6/120/0.75x V38	5.6–64	120	V38	90	standard	46 x 54.7	164	M40.5 x 0.5	1097786	Download
PYRITE 5.6/120/0.5x V38	5.6–64	120	V38	90	standard	46 x 54.7	164	M40.5 x 0.5	1097787	Download
PYRITE 5.6/120/0.33x V38	5.6–64	120	V38	90	standard	46 x 54.7	164	M40.5 x 0.5	1097788	Download

AMBER

Uniform imaging performance for large sensors

Key Features:

- 6 focal lengths: 28 mm – 100 mm
- Initial apertures: F2.8 – F5.6
- Homogeneous imaging performance across the entire image field
- V38-Mount, compatible to the V38 mounting system
- Very low distortion and high resolution
- Small and compact design

Typical applications:

- Machine Vision
- AOI (Automated Optical Inspection)
- FPD/PCB inspection
- Logistics

Name	Aperture	Focal length (mm)	Mount	Sensor size	Type	Size D x L (mm x mm)	Weight (g)	Filter thread	Code	Datasheet
NEW AMBER 2.8/28 V38	2.8–22	28	V38	28.7	standard	47 x 35.8	113	M37 x 0.75	1113083	Download
NEW AMBER 2.8/35 V38	2.8–22	35	V38	28.7	standard	44 x 35.4	105	M37 x 0.75	1112805	Download
AMBER 2.8/40 V38	2.8–22	40	V38	43.2	standard	47 x 37	104	M37 x 0.75	1111934	Download
AMBER 4.0/60V38	4.0–32	60	V38	62.5	standard	47 x 38	113	M37 x 0.75	1111933	Download
AMBER 4.0/80 V38	4.0–32	80	V38	82	standard	47 x 40	132	M37 x 0.75	1111932	Download
AMBER 5.6/100 V38	5.6–22	100	V38	82	standard	47 x 45	145	M37 x 0.75	1111931	Download

PEARL

4k/7 µm, 8k/3.5 µm Line Scan and more

Key Features:

- Image circle 28.7 mm
- 2 focal lengths: 28 mm & 35 mm
- Initial aperture: 2.8
- M42x1 Mount with integrated focusing
- Uniform MTF across the entire image field
- Very low distortion

Typical applications:

- Machine Vision
- AOI (Automated Optical Inspection)
- FPD/PCB inspection
- Logistics

Name	Aperture	Focal length (mm)	Mount	Sensor size	Type	Size D x L (mm x mm)	Weight (g)	Filter thread	Code	Datasheet
NEW PEARL 2.8/28 M42x1	2.8–22	28	V38	28.7	standard	47 x 48.2	137	M37 x 0.75	1113086	Download
NEW PEARL 2.8/35 M42x1	2.8–22	35	V38	28.7	standard	44 x 51.5	135	M37 x 0.75	1112807	Download

PYRITE LF

The universal lens solution²

Key Features:

- Focus tunable liquid lens included
- Large working distance range
- Fast focus within milliseconds
- Large image circle

Typical applications:

- Machine Vision
- Package sorting/logistic
- Bar code reading
- Quality control

Name	Aperture	Focal length (mm)	Mount	Sensor size	Type	Size D x L (mm x mm)	Weight (g)	Filter thread	Code	Datasheet
PYRITE 4.0/60 C-LF	4.0–32	60	C	24	liquid lens focus	47** x 71	280	M37 x 0.75	1102613	Download
PYRITE 4.0/60 TFL-LF	4.0–32	60	TFL	32	liquid lens focus	47** x 71	280	M37 x 0.75	1102615	Download
PYRITE 4.0/80 C-LF	4.0–45	80	C	24	liquid lens focus	47** x 96	310	M37 x 0.75	1102609	Download
PYRITE 4.0/80 TFL-LF	4.0–45	80	TFL	36	liquid lens focus	47** x 96	310	M37 x 0.75	1102611	Download

**Plus 23 mm with connector of the liquid lens

ZIRCONIA

The budget solution for high end line scan

Key Features:

- Image circle: 62.5 mm – 82 mm
- High resolution down to 5µ pixel size
- 6 magnifications available: 0.1x – 2.0x
- Optimized for specific magnifications
- V48-Mount for easy installation
- Best azimuth marking
- Version with beamsplitter available

Typical applications:

- FPD inspection
- PCB inspection
- High resolution defect detection
- Quality assurance

Name	Aperture	Focal length (mm)	Mount	Sensor size	Type	Size D x L (mm x mm)	Weight (g)	Filter thread	Code	Datasheet
ZIRCONIA 0.01/0.1x V48	0.01	0.1x	V48	62.5 mm	standard	55 x 63	246	M46 x 0.75	1101929	Download
ZIRCONIA 0.03/0.2x V48	0.03	0.2x	V48	62.5 mm	standard	55 x 63	246	M46 x 0.75	1073622	Download
ZIRCONIA 0.05/0.5x V48	0.05	0.5x	V48	62.5 mm	standard	55 x 64.4	250	M46 x 0.75	1076966	Download
ZIRCONIA 0.07/0.7x V48	0.07	0.7x	V48	62.5 mm	standard	55 x 68.7	250	M46 x 0.75	1078947	Download
ZIRCONIA 0.09/1.0x V48	0.09	1.0x	V48	62.5 mm	standard	55 x 65.1	250	M46 x 0.75	1078948	Download
ZIRCONIA XL 0.03/0.33x V48	0.03	0.33x	V48	82 mm	standard	55 x 60.5	242	M46 x 0.75	1079651	Download
ZIRCONIA XL 0.10/2.0x V48	0.1	2.0x	V48	82 mm	standard	55 x 63.7	250	M46 x 0.75	1078872	Download
ZIRCONIA XL 0.10/2.0x V48-BS	0.1	2.0x	V48	82 mm	with beamsplitter	95 x 104.6	560	–	1078988	Download

SAPPHIRE

The standard for 12k / 16k line scan

Key Features:

- Image circle: 62.5 mm – 82 mm
- Extremely high resolution down to 3.5µ pixel size
- 11 magnifications available: 0.07x – 2.0x
- Optimized for specific magnifications
- V70-Mount for easy installation
- Version with Beamsplitter available
- Best azimuth marking

Typical applications:

- FPD inspection
- PCB inspection
- High resolution defect detection
- AOI (Automated Optical Inspection)

Name	Aperture	Focal length (mm)	Mount	Sensor size	Type	Size D x L (mm x mm)	Weight (g)	Filter thread	Code	Datasheet
SAPPHIRE 0.007/0.07x V70	0.007	0.07x	V70	62.5 mm	standard	75 x 102.7	735	M52 x 0.75	1068013	Download
SAPPHIRE 0.02/0.23x V70	0.02	0.23x	V70	62.5 mm	standard	75 x 98.2	700	M52 x 0.75	1071819	Download
SAPPHIRE 0.03/0.29x V70	0.03	0.29x	V70	62.5 mm	standard	75 x 98.3	700	M52 x 0.75	1071818	Download
SAPPHIRE 0.04/0.35x V70	0.04	0.35x	V70	62.5 mm	standard	75 x 97.5	830	M52 x 0.75	1068012	Download
SAPPHIRE 0.05/0.5x V70	0.05	0.5x	V70	62.5 mm	standard	75 x 100.1	700	M52 x 0.75	1071189	Download
SAPPHIRE 0.06/0.7x V70	0.06	0.7x	V70	62.5 mm	standard	75 x 98.3	810	M52 x 0.75	1071190	Download
SAPPHIRE 0.08/0.875x V70	0.08	0.875x	V70	62.5 mm	standard	75 x 98.1	720	M52 x 0.75	1076452	Download
SAPPHIRE 0.09/1.143x V70	0.09	1.143x	V70	62.5 mm	standard	75 x 150.8	750	M58 x 0.75	1076453	Download
SAPPHIRE 0.10/1.75x V70	0.1	1.75x	V70	62.5 mm	standard	75 x 91.5	688	M40.5 x 0.5	1068014	Download
SAPPHIRE 0.10/1.75x V70-BS	0.1	1.75x	V70	62.5 mm	with beamsplitter	95 x 122	935	–	1073347	Download
SAPPHIRE XL 0.09/1.43x V70	0.09	1.43x	V70	82 mm	standard	75 x 149.8	840	M58 x 0.75	1076096	Download
SAPPHIRE XL 0.10/2.0x V70	0.1	2.0x	V70	82 mm	standard	75 x 149	840	M58 x 0.75	1076451	Download

DIAMOND

High magnification for 12k and 16k linescan applications

Key Features:

- Image circle: 62.5 mm – 82 mm
- Extremely high resolution down to 3.5µ pixel size
- 5 magnifications available: 2.6x – 5.2x
- Optimized for specific magnifications
- V-Mount for easy installation
- Best azimuth marking
- Versions with beamsplitter available

Typical applications:

- FPD inspection
- PCB inspection
- Micro defect detection
- AOI (Automated Optical Inspection)

Name	Aperture	Focal length (mm)	Mount	Sensor size	Type	Size D x L (mm x mm)	Weight (g)	Filter thread	Code	Datasheet
DIAMOND 0.13/2.6x V70	0.13	2.6x	V70	62.5 mm	on request	75 x 132.4	1140	M40.5 x 0.5	1078039	Download
DIAMOND 0.12/2.6x V70-BS	0.12	2.6x	V70	62.5 mm	with beamsplitter	95 x 157.5	1350	–	1076949	Download
DIAMOND 0.17/3.5x V90	0.17	3.5x	V90	62.5 mm	on request	95 x 174	2008	M40.5 x 0.5	1076963	Download
DIAMOND 0.16/3.5x V90-BS	0.16	3.5x	V90	62.5 mm	with beamsplitter	95 x 204.5	2260	–	1079718	Download
DIAMOND 0.22/5.2x V70	0.22	5.2x	V70	62.5 mm	on request	75 x 142	1030	M58 x 0.75	1079320	Download
DIAMOND 0.22/5.2x V70-BS	0.22	5.2x	V70	62.5 mm	with beamsplitter	95 x 168.1	1252	M58 x 0.75	1081873	Download
DIAMOND XL 0.16/3.33x V90-BS	0.16	3.33x	V90	82 mm	with beamsplitter	95 x 208.2	1900	–	1098892	Download
DIAMOND XL 0.21/5.0x V70-BS	0.21	5.0x	V70	82 mm	with beamsplitter	95 x 168.1	1170	M58 x 0.75	1099014	Download

Filters

Schneider-Kreuznach optical filters are high performance technical filters that have been adapted to the requirement of industrial users in research, engineering production. These filters feature improved optical quality, are provided with detailed technical parameters, and have passed a strict quality assurance process.

28 BANDPASS

29 NARROW BANDPASS

30 SWIR

31 SHORTPASS

32 LONGPASS

33 NEUTRAL DENSITY

34 POLARIZER

35 COLOR

36 UV-CUT FILTERS & IR-CUT FILTERS

Technical Terms

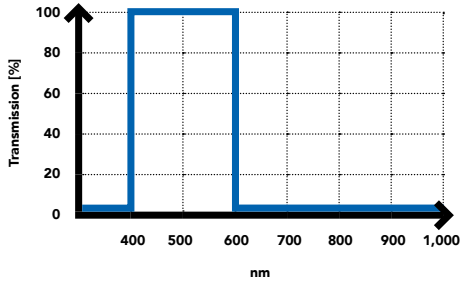
Abbreviation	Meaning
BP	BANDPASS
NBP	NARROW BANDPASS
SP	SHORTPASS
LP	LONGPASS
ND	NEUTRAL DENSITY
IFK	Polarizing Film
AUF	Polarizer
HT	High Transmission
E	Single Layer Coated
MRC	Multi Resistant Coating

BANDPASS

Transmits a defined wavelength range

Key Features:

- Average transmission 95 %
- Steep slopes
- Wavelength tolerance +/- 1 nm
- Ultra low reflection
- Deep blocking / high OD



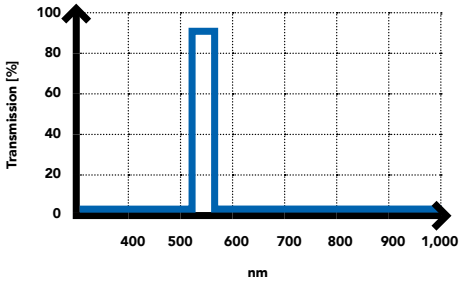
Color	Name	Status	Order name	Wavelength range, 50 %–50 % [nm]	Center wavelength [nm]	Bandwidth [nm]	Datasheet
	BP 465-70 HT	standard	BP 465-70 HT	430-500	465	70	Download
	BP 490 -180 HT	on request	BP 490 -180 HT	400-580	490	180	Download
	BP 515-270 HT	on request	BP 515-270 HT	380-650	515	270	Download
	BP 520-280 HT	on request	BP 520-280 HT	380-660	520	280	Download
	BP 540-80 HT	standard	BP 540-80 HT	495-580	540	80	Download
	BP 540-300 HT	standard	BP 540-300 HT	390-690	540	300	Download
	VIS-85 HT	on request	VIS-85 HT	420-640 / 830-870	530 / 850	220 / 40	Download
	BP 575-170 HT	standard	BP 575-170 HT	495-660	575	170	Download
	BP 590-50 HT	standard	BP 590-50 HT	565-615	590	50	Download
	BP 590-200 HT	on request	BP 590-200 HT	495-690	590	200	Download
	BP 635-50 HT	standard	BP 635-50 HT	610-660	635	50	Download
	BP 640-100 HT	on request	BP 640-100 HT	590-690	640	100	Download
	BP 660-60 HT	standard	BP 660-60 HT	630-690	660	60	Download
	BP 680-100 HT	on request	BP 680-100 HT	630-730	680	100	Download
	BP 850-80 HT	standard	BP 850-80 HT	810-890	850	80	Download
	BP 865-100 HT	standard	BP 865-100 HT	815-915	865	100	Download

NARROW BANDPASS

Transmits a small defined wavelength range

Key Features:

- Average transmission 90 %
- Steep slopes
- Wavelength tolerance +/- 3 nm
- Deep blocking / high OD



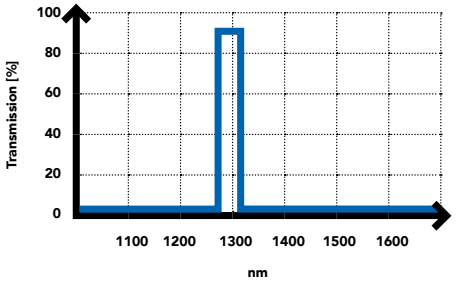
Color	Name	Status	Order name	Wavelength range, 50 %–50 % [nm]	Center wavelength [nm]	Bandwidth [nm]	Datasheet
	NBP 405-15 HT	on request	NBP 405-15 HT	398-412	405	15	Download
	NBP 450-40 HT	standard	NBP 450-40 HT	433-466	450	40	Download
	NBP 457-20 HT	on request	NBP 457-20 HT	447-467	457	10	Download
	NBP 488-20 HT	on request	NBP 488-20 HT	478-498	488	20	Download
	NBP 532-20 HT	on request	NBP 532-20 HT	522-542	532	20	Download
	NBP 635-20 HT	standard	NBP 635-20 HT	625-645	635	20	Download
	NBP 660-10 HT	standard	NBP 660-10 HT	655-665	660	10	Download
	NBP 810-45 HT	on request	NBP 810-45 HT	788-832	810	45	Download
	NBP 830-20 HT	on request	NBP 830-20 HT	820-840	830	20	Download

SWIR

See the invisible

Key Features:

- Average transmission 80-90 %
- Steep slopes
- Wavelength tolerance +/- 5 nm
- Deep blocking / high OD



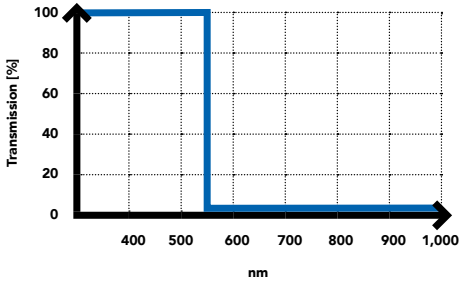
Color	Name	Status	Order name	Wavelength range, 50 %–50 % [nm]	Center wavelength [nm]	Bandwidth [nm]	Datasheet
NEW	NBP 1300-25 HT	standard	NBP 1300-25 HT	1287-1313	1300	25	Download
NEW	NBP 1450-25 HT	standard	NBP 1450-25 HT	1437-1463	1450	25	Download
NEW	NBP 1550-35 HT	standard	NBP 1550-35 HT	1532-1568	1550	35	Download

SHORTPASS

Blocks longwave light down to the cut-off-wavelength

Key Features:

- Average transmission 95 %
- Steep slopes
- Wavelength tolerance +/- 1 nm
- Ultra low reflection
- Deep blocking / high OD



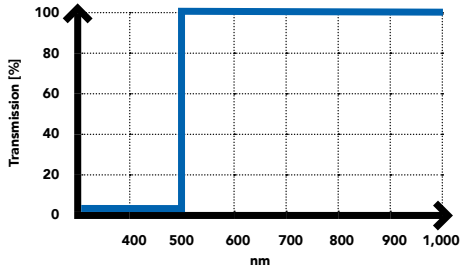
Color	Name	Status	Order name	Cut-off wavelength, 50% [nm]	Type	Datasheet
	SP 460 HT	on request	SP 460 HT	460	interference	Download
	SP 515 HT	on request	SP 515 HT	515	interference	Download
	SP 615 HT	on request	SP 615 HT	615	interference	Download
	SP 700 E	standard	SP 700 E	700	absorption	Download
	SP 730 HT	on request	SP 730 HT	730	interference	Download
	SP 760 HT	on request	SP 760 HT	760	interference	Download
	SP 790 HT	on request	SP 790 HT	790	interference	Download
	SP 850 HT	on request	SP 850 HT	850	interference	Download

LONGPASS

Blocks shortwave light up to the cut-on-wavelength

Key Features:

- Average transmission 95 %
- Steep slopes
- Wavelength tolerance +/- 1 nm
- Ultra low reflection
- Deep blocking/ high OD



Color	Name	Status	Order name	Cut-on wavelength, 50% [nm]	Type	Datasheet
	LP 365 E	standard	LP 365 E	365	interference	Download
	LP 400 HT	on request	LP 400 HT	400	interference	Download
	LP 430 HT	standard	LP 430 HT	430	interference	Download
	LP 460 HT	on request	LP 460 HT	460	interference	Download
	LP 495 HT	on request	LP 495 HT	495	interference	Download
	LP 515 HT	on request	LP 515 HT	515	interference	Download
	LP 530 HT	on request	LP 530 HT	530	interference	Download
	LP 565 HT	on request	LP 565 HT	565	interference	Download
	LP 590 HT	on request	LP 590 HT	590	interference	Download
	LP 600 E	standard	LP 600 E	600	absorption	Download
	LP 610 HT	on request	LP 610 HT	610	interference	Download
	LP 625 E	standard	LP 625 E	625	absorption	Download
	LP 630 HT	on request	LP 630 HT	630	interference	Download
	LP 695	standard	LP 695	695	absorption	Download
	LP 695 HT	on request	LP 695 HT	695	interference	Download
	LP 725 HT	on request	LP 725 HT	725	interference	Download
	LP 765 HT	standard	LP 765 HT	765	interference	Download
	LP 775 E	standard	LP 775 E	775	absorption	Download
	LP 780 HT	on request	LP 780 HT	780	interference	Download
	LP 820 HT	standard	LP 820 HT	820	interference	Download
	LP 825	standard	LP 825	825	absorption	Download
	LP 850 HT	on request	LP 850 HT	850	interference	Download
	LP 900 HT	standard	LP 900 HT	900	interference	Download

NEUTRAL DENSITY

Reduces brightness without effecting the colors

Key Features:

- Insensitive to angle of incidence
- Decreases brightness without changing depth of field
- Stackable, combine ND filters to achieve OD needed
- Even attenuation avoids effects on color balance

Color	Neutral Density	Status	Order name	Optical density	Transmission average [%]	Bandwidth [nm]	Datasheet
	ND 0.6	standard	802	0.6	25.0	/	Download
	ND 0.9	standard	803	0.9	12.5	/	Download
	ND 1.8	standard	806	1.8	1.6	/	Download
	ND 3.0	standard	810	3.0	0.1	/	Download
	ND 102	on request	102 E	0.6	25.0	/	Download
	ND 106	on request	106	1.8	1.6	/	Download
	ND 110	on request	110	3.0	0.1	/	Download

POLARIZER

Reduces reflections and increases contrast

Key Features:

- Reduces reflections, increases contrast
- High extinction ratio
- Pre-cut custom shapes for polarizing films on request

Color	Name	Status	Order name	Transmission [%]	Extinction ratio	Thickness [mm]	Wavelength range [nm]	Datasheet
	Linear Polarizing Glass	standard	AUF	34	>10,000:1	2.7	420-750	Download
	Linear Polarizing Glass	standard	AUF MRC	34	>10,000:1	2.7	420-750	Download
	Linear Polarizing Film	standard	IFK P-W 76 0.3	30	>10,000:1	0.3	430-780	Download
	Linear Polarizing Film	standard	IFK P-W 64 0.4	30	>40,000:1	0.4	430-780	Download

COLOR

Absorbs unwanted wavelengths

Key Features:

- AR coating available
- Insensitive to angle of incidence
- Large CA, absence of vignetting
- Improves contrast
- Isolates colors

Color	Name	Status	Order name	Cut-on wavelength [nm]	Color	Filter type	Wavelength range [nm]	Datasheet
	LP 600 E	standard	LP 600 E	600	Light Red	Longpass	420-750	Download
	LP 625 E	standard	LP 625 E	625	Red	Longpass	420-750	Download
	LP 695	standard	LP 695	695	Red	Longpass	430-780	Download
	LP 775 E	standard	LP 775 E	775	IR Pass	Longpass	430-780	Download
	LP 825	standard	LP 825	825	IR Pass	Longpass	430-780	Download

UV-CUT FILTERS & IR-CUT FILTERS

Blocks unwanted Wavelengths and protects lens and sensor against dirt and external influences

Key Features:

- High transmission
- Low reflection
- Cost effective protection of sensible units
- High reproducibility

Color	Name	Status	Order name	Description	Color	Filter type	Wavelength range [nm]	Datasheet
	LP 365 E	standard	LP 365 E	UV-Cut	Neutral	Longpass	420-750	Download
	BP 540-300 HT	standard	BP 540-300 HT	UV/IR-Cut	Neutral	Bandpass	420-750	Download
	SP 700 E	standard	SP 700 E	IR-Cut	Neutral	Shortpass	430-780	Download
	BP 515-270 HT	on request	BP 515-270 HT	UV/IR-Cut	Neutral	Bandpass	430-780	Download
	BP 520-280 HT	on request	BP 520-280 HT	UV/IR-Cut	Neutral	Bandpass	430-780	Download
	VIS-85 HT	on request	VIS-85 HT	VIS + BP 850	Neutral	Bandpass	420-640nm / 830-870 nm	Download

Accessories

Build up the ideal optical system for your individual application.

38 UNIFOC
39 EXTENSION TUBES
40 FILTER HOLDERS
41 ADAPTERS
42 OTHERS

UNIFOC

The external focusing device

Key Features:

- Easy handling
- Ideal for industrial applications
- High stability
- Combinable with other accessories

Name	ID	Length [mm]	Mount	Drawing
UNIFOC 5 V38/C 19.2-24.2 mm	1011634	19.2-24.2	V38 / C	Download
UNIFOC 7 V38/V38 20-27 mm	1001041	20-27	V38 / V38	Download
NEW UNIFOC 7 V38/M42x1 20-27 mm	1113231	20-27	V38 / M42x1	Download
UNIFOC 7 V38/M58x0.75 20-27 mm	1054532	20-27	V38 / M58x0.75	Download
UNIFOC 12 V38/V38 17.4-29.4 mm	11726	17.4-29.4	V38 / V38	Download
UNIFOC 22 V48/V70 15.6-37.6 mm	1075304	15.6-37.6	V48 / V70	Download
UNIFOC 25 L/M42x0.75 18.8-44.5 mm	39549	18.8-44.5	Leica / T2	Download
UNIFOC 25 L/M58x0.75 18.8-44.5 mm	13048	18.8-44.5	Leica / M58x0.75	Download

EXTENSION TUBES

The tool to adapt the magnification

Key Features:

- Easy handling
- Ideal for industrial applications
- High stability
- Combinable with other accessories

Name	ID	Length [mm]	Mount	Drawing
EXTENSION TUBE C/C 5 mm	39316	5	C / C	Download
EXTENSION TUBE C/C 7 mm	1105140	7	C / C	Download
EXTENSION TUBE C/C 8 mm	39315	8	C / C	Download
EXTENSION TUBE C/C 10 mm	39312	10	C / C	Download
EXTENSION TUBE TFL/TFL 5 mm	1105130	5	TFL / TFL	Download
EXTENSION TUBE TFL/TFL 7 mm	1105131	7	TFL / TFL	Download
EXTENSION TUBE TFL/TFL 8 mm	1105132	8	TFL / TFL	Download
EXTENSION TUBE TFL/TFL 10 mm	1105133	10	TFL / TFL	Download
EXTENSION TUBE V38/V38 6 mm	20176	6	V38 / V38	Download
EXTENSION TUBE V38/V38 8 mm	20177	8	V38 / V38	Download
EXTENSION TUBE V38/V38 10 mm	20178	10	V38 / V38	Download
EXTENSION TUBE V38/V38 25 mm	20179	25	V38 / V38	Download
EXTENSION TUBE V38/V38 50 mm	20154	50	V38 / V38	Download
EXTENSION TUBE V38/V38 75 mm	20155	75	V38 / V38	Download
EXTENSION TUBE M42x0.75/M42x0.75 5 mm	1105879	5	M42x0.75 / M42x0.75	Download
EXTENSION TUBE M42x0.75/M42x0.75 10 mm	1105880	10	M42x0.75 / M42x0.75	Download
EXTENSION TUBE M42x0.75/M42x0.75 25 mm	41643	25	M42x0.75 / M42x0.75	Download
EXTENSION TUBE M42x1/M42x1 5 mm	1105877	5	M42x1 / M42x1	Download
EXTENSION TUBE M42x1/M42x1 10 mm	1105878	10	M42x1 / M42x1	Download
EXTENSION TUBE V48/V48 10 mm	1072661	10	V48 / V48	Download
EXTENSION TUBE V48/V48 25 mm	1072651	25	V48 / V48	Download
EXTENSION TUBE V48/V48 50 mm	1072662	50	V48 / V48	Download
EXTENSION TUBE M58x0.75/M58x0.75 10 mm	13051	10	M58x0.75	Download
EXTENSION TUBE M58x0.75/M58x0.75 25 mm	13050	25	M58x0.75	Download
EXTENSION TUBE M72x0.75/M72x0.75 5 mm	1072420	5	M72x0.75 / M72x0.75	Download
EXTENSION TUBE M72x0.75/M72x0.75 10 mm	1072421	10	M72x0.75 / M72x0.75	Download
EXTENSION TUBE M72x0.75/M72x0.75 25 mm	26406	25	M72x0.75 / M72x0.75	Download
EXTENSION TUBE M72x0.75/M72x0.75 50 mm	1054733	50	M72x0.75 / M72x0.75	Download
EXTENSION TUBE M72x0.75/M72x0.75 100 mm	1079483	100	M72x0.75 / M72x0.75	Download
EXTENSION TUBE M90x1/M90x1 10 mm	1084875	10	M90x1 / M90x1	Download
EXTENSION TUBE M90x1/M90x1 25 mm	1084876	25	M90x1 / M90x1	Download
EXTENSION TUBE M90x1/M90x1 50 mm	1084877	50	M90x1 / M90x1	Download
EXTENSION TUBE M90x1/M90x1 100 mm	1084878	100	M90x1 / M90x1	Download
EXTENSION TUBE M95x1/M95x1 10 mm	1077290	10	M95x1 / M95x1	Download
EXTENSION TUBE M95x1/M95x1 25 mm	1062892	25	M95x1 / M95x1	Download
EXTENSION TUBE M95x1/M95x1 50 mm	1062893	50	M95x1 / M95x1	Download
EXTENSION TUBE M95x1/M95x1 100 mm	1062894	100	M95x1 / M95x1	Download

FILTER HOLDERS

For lenses without integrated filter thread

Key Features:

- Easy handling
- Ideal for industrial applications
- High stability
- Combineable with other accessories

Name	ID	Length [mm]	Mount	Drawing
FILTER HOLDER M49x0.75/39 3.5 mm	1086400	3.5	M49x0.75 / 39	Download
FILTER HOLDER M62x0.75/37 4.5 mm	14604	4.3	M62x0.75 / 37	Download
FILTER HOLDER M62x0.75/50 3.8 mm	1099613	3.8	M62x0.75 / 50	Download
FILTER HOLDER M82x0.75/55 4.8 mm	1078041	4.8	M82x0.75 / 55	Download

ADAPTERS

The tool to adapt the lens to any camera

Key Features:

- Easy handling
- Ideal for industrial applications
- High stability
- Combineable with other accessories

Name	ID	Length [mm]	Mount	Drawing
ADAPTER C/CS 5 mm	25081	5	C / CS	Download
ADAPTER C/M42x1 5.5 mm	1075817	5.5	C / M42x1	Download
ADAPTER TFL/M42x1 5.5 mm	1104101	5.5	TFL / M42x1	Download
ADAPTER TFL/M58x0.75 5.5 mm	1108651	5.5	TFL / M58x0.75	Download
ADAPTER V38/C 6.5 mm	20052	6.5	V38 / C	Download
ADAPTER V38/TFL 6.5 mm	1098491	6.5	V38 / TFL	Download
ADAPTER V38/L 6.5 mm	20054	6.5	V38 / Leica	Download
ADAPTER V38/M42x0.75 6.5 mm	20053	6.5	V38 / M42x0.75	Download
ADAPTER V38/M42x1 6.5 mm	20059	6.5	V38 / M42x1	Download
ADAPTER V38/M42x1 35 mm	1001692	35	V38 / M42x1	Download
ADAPTER V38/M58x0.75 10 mm	1018385	10	V38 / M58x0.75	Download
ADAPTER V38/F 9.3 mm	21610	9.3	V38 / F	Download
ADAPTER M42x0.75/C 5.5 mm	41629	5.5	T2 / C	Download
ADAPTER M42x0.75/F	21591	10	T2 / F	Download
ADAPTER M42x0.75/M42x1 9.5 mm	21592	9.5	T2 / M42x1	Download
ADAPTER V48/C 8.5 mm	1072650	8.5	V48 / C	Download
ADAPTER V48/TFL 8.5 mm	1098492	8.5	V48 / TFL	Download
ADAPTER V48/M42x0.75 8.5 mm	1072652	8.5	V48 / M42x0.75	Download
ADAPTER V48/M42x1 8.5 mm	1072660	8.5	V48 / M42x1	Download
ADAPTER V48/M58x0.75 10 mm	1072659	10	V48 / M58x0.75	Download
ADAPTER M50x0.75/L 31.5 mm	17231	31.5	M50x0.75 / Leica	Download
ADAPTER M58x0.75/M72x0.75 2 mm	13052	2	M58 / M72x0.75	Download
ADAPTER M58x0.75/M95x1 4 mm	1062891	4	M58 / M95x1	Download
ADAPTER M58x0.75/M90x1 4 mm	1084880	4	M58x0.75 / M90x1.0	Download
ADAPTER V70/M72x0.75 10 mm	1072419	10	V70 / M72x0.75	Download
ADAPTER M72x0.75/M42x1 6 mm	1079515	6	M72x0.75 / M42x1.0	Download
ADAPTER M72x0.75/M58x0.75 6 mm	1075556	6	M72x0.75 / M58x0.75	Download
ADAPTER M72x0.75/M90x1 4 mm	1084879	4	M72x0.75 / M90x1	Download
ADAPTER M72x0.75/M95x1 4 mm	1077013	4	M72x0.75 / M95x1	Download
ADAPTER V90/M95x1 10 mm	1077293	10	V90 / M95x1	Download
ADAPTER M95x1/M72x0.75 6.6 mm	1077295	6.6	M95x1 / M72x0.75	Download
ADAPTER M95x1/M90x1 6.6 mm	1084889	6.6	M95x1 / M90x1	Download
ADAPTER V38/M37x0.75 3.5 mm	1100587	19.5	V38 / M37x0.75	Download
ADAPTER V38/M40.5x0.5 3.5 mm	1100588	23.5	V38 / M40.5x0.5	Download

OTHERS

Name	ID	Description	Drawing
TELECENTRIC CLAMP	36378	Robust mounting clamp for telecentric lenses	Download
V38 ASSEMBLY KIT	20042	Spare screws and Allen key	Download

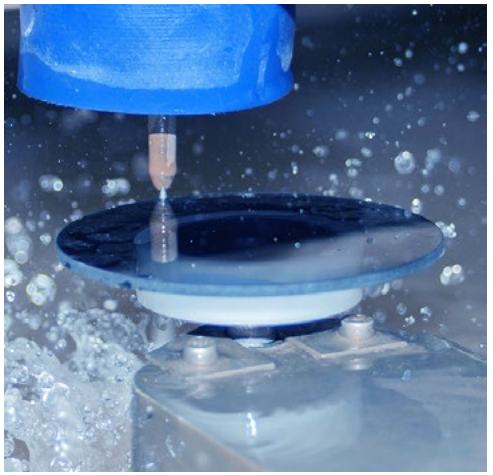
Customized Solutions

Like no other manufacturer Schneider-Kreuznach understand the exact requirements that optical components for industrial applications have to meet. We know that precision, quality and reliability form the basis for long-term solutions.

Whether standard industrial optics or custom-made solutions – we guarantee the absolute precision and uniformity of our products. Mature designs and already legendary optical expertise ensure tailored solutions which combine mechanical robustness, reliability, and maximum precision in reproduction.

It works thanks to our decades of experience with extremely tight tolerances. We even go so far as to develop and produce our own production and measuring systems when there are no such accurate devices on the market.

We offer
Full service: From planning to development to series production
Customized lenses
Mechanical and optical adaptions on our standard lenses
Customized filters
Special coatings for filters or lenses
Lenses with integrated filters
Optical Filters in special sizes and outlines
Mechanics
Optical components as cylindrical lenses
Pre-cuts



Complete vertical integration

- Production of optics
- Coatings
- Production of mechanics
- Clean room assembly
- Quality assurance

Precise pre-cuts with Micro Water-Jet

Micro water-jet cutting is a non-thermal cutting process. It provides the finest cut surfaces that are not affected by heat. With our micro water-jet cutter almost all shapes of filters can be cut according to your specification.

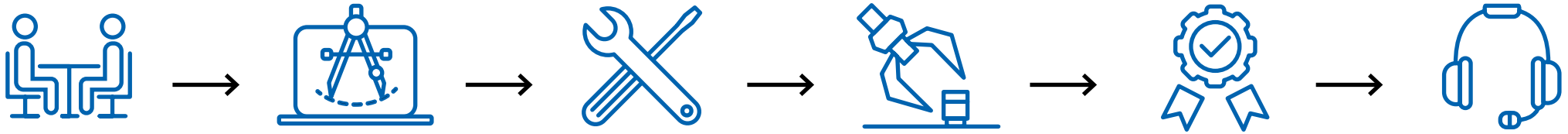
High precision cylindric lens elements

A cylindric lens element is an optical element with at least one cylindrically shaped surface. Cylindric lens elements are used in optical metrology and laser scanning but also in cinematographic lenses for wide screen imaging and projection.

We create solutions for our customers

Beyond our standard range of lenses, optical filters and systems, some projects require customized products. Having development and production on site enables us to serve our customers with the best solution for their most challenging projects. From customized adaptions of our standard products up to the full development of imaging solutions, we collaborate closely with the customer. We design and produce the optics according to your requirements.

The customized Solution Process



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Jos. Schneider Optische Werke GmbH
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We accept no responsibility for any errors
and reserve the right of modification without
further notice.

Version 17/November 2026

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Appendix

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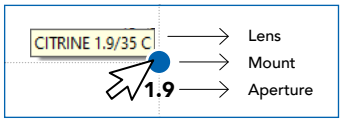
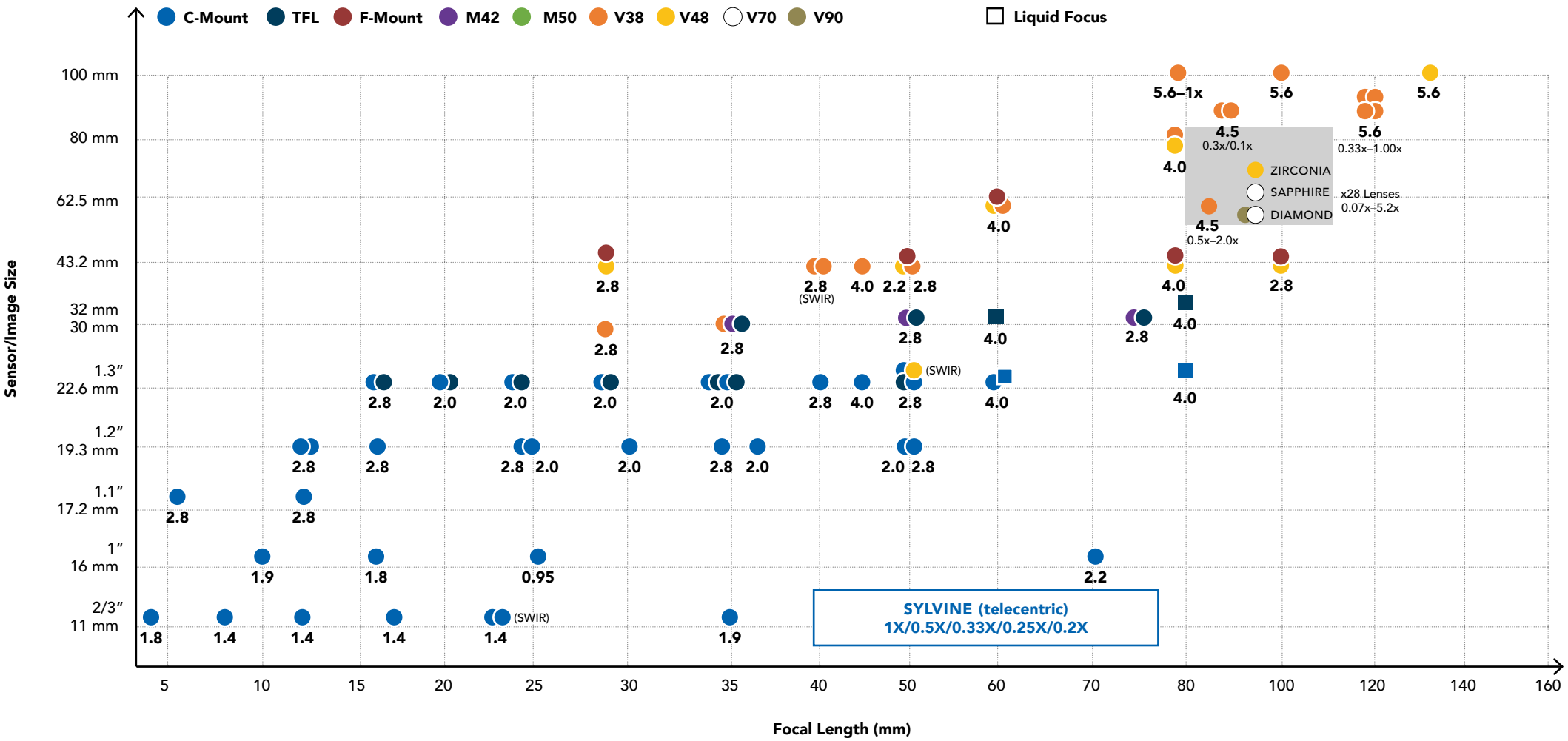
Lens Chart

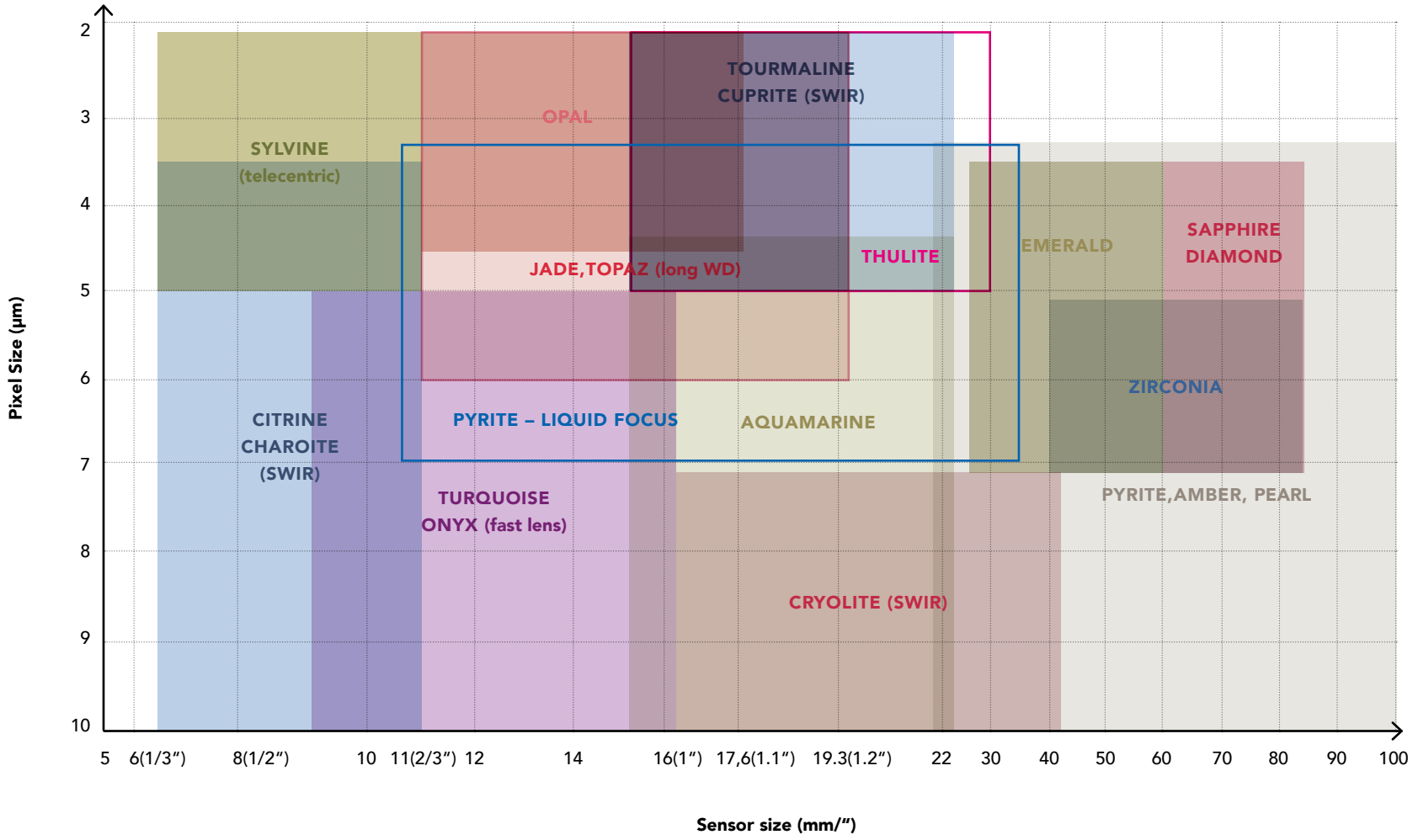
Ratio of image size an focal length.





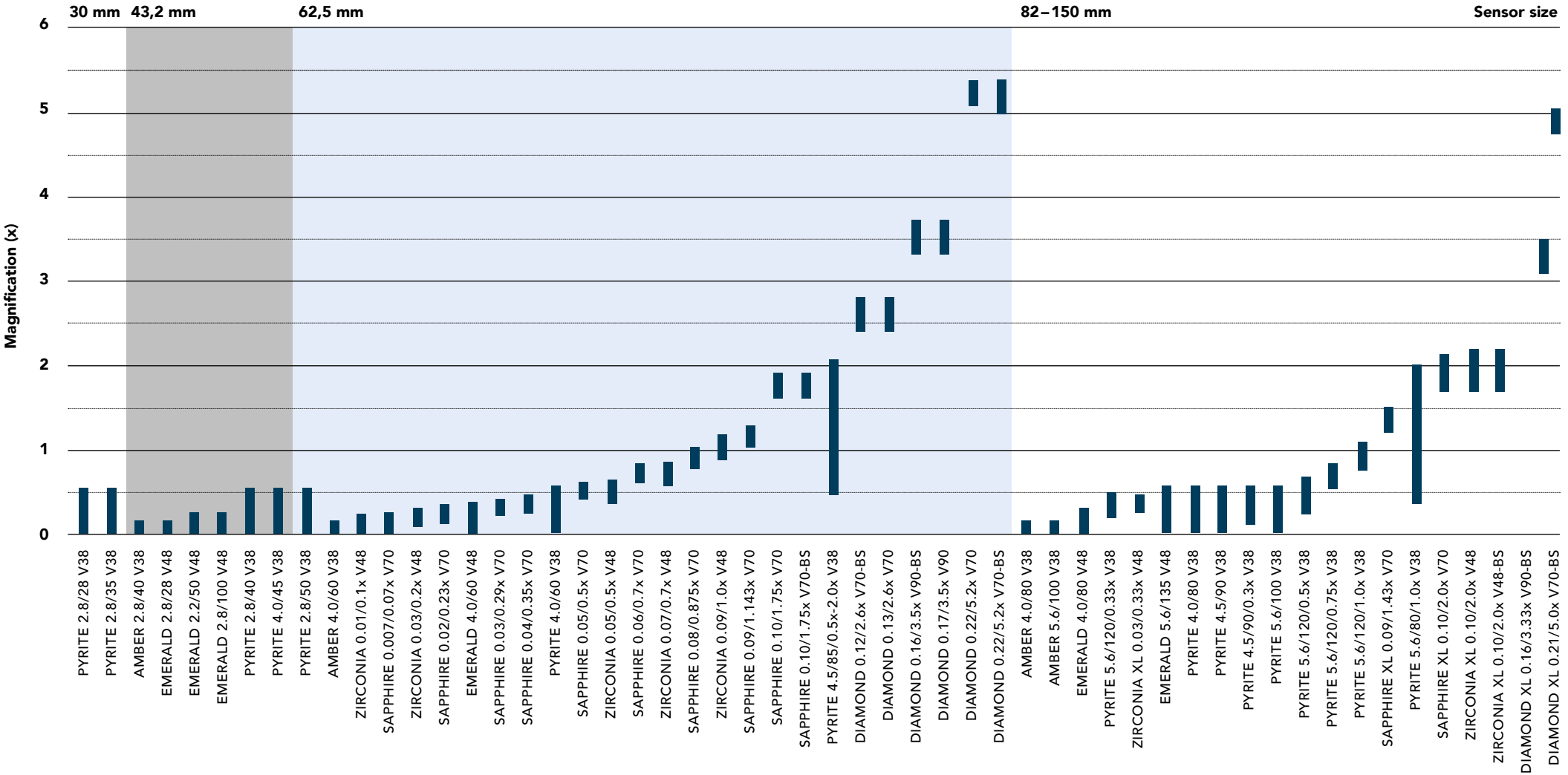
Resolution vs. sensor sizes

Suitability of the lens families in terms of sensor and pixel size.



Magnification vs. Image size

Magnification range of the large format lenses.



Please note: the average values are used for the lenses shown, individual models may be larger or smaller.

COMPACT LENSES

AQUAMARINE

TOPAZ

TOURMALINE

TURQUOISE

CITRINE

OPAL

JADE

SWIR LENSES

CHAROITE

CHROMITE

CRYOLITE

CUPRITE

LARGE FORMAT LENSES

AMBER

PEARL

PYRITE

THULITE

EMERALD

FAST LENSES

ONYX

DIAMOND

TELECENTRIC LENSES

TITANITE

SYLVINE

LINE SCAN LENSES

ZIRCONIA

SAPPHIRE

LIQUID LENSES

PYRITE – LIQUID FOCUS