



No 1 in terms of
ACCURACY
RELIABILITY
INNOVATION



Accessories Supplementary lenses

for pyrometers of the Cellatemp® PA,
Cellatemp® PX and Cellaport PT series

Accessories Supplementary lenses

Special features

- Screw-on type, easily attachable to the lens
- No influence on the calibration
- Distance-to-target ratio remains unchanged
- Very good optical imaging qualities due to infrared-optimised precision lenses
- High optical resolution for object sizes from 0.1 mm upwards
- Suitable for devices with a round or rectangular measuring field of view

For the measurement of small objects, the pyrometers of the Cellatemp PA, Cellatemp PX and Cellatemp PT series can be equipped with a variety of supplementary lenses for different object sizes and measuring distances. These lenses are simply mounted on the pyrom-

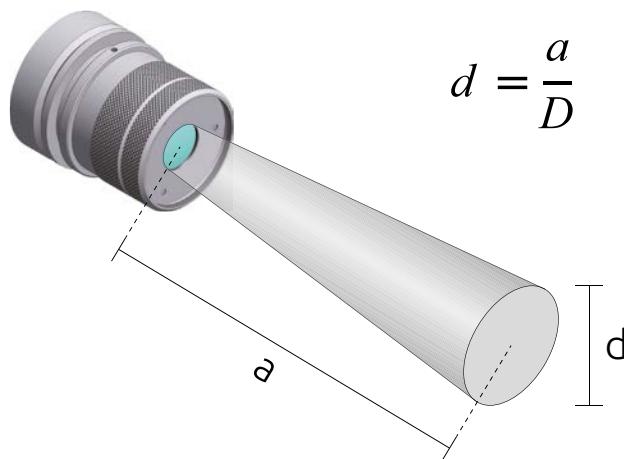


eter lens. The combination of various pyrometer types with supplementary lenses offer many additional imaging options for object sizes from 0.1 mm upwards.

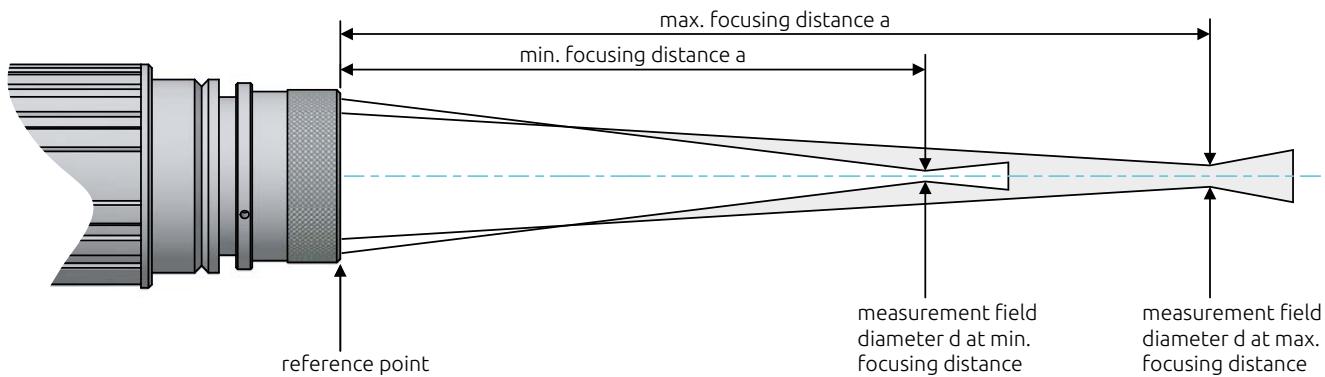
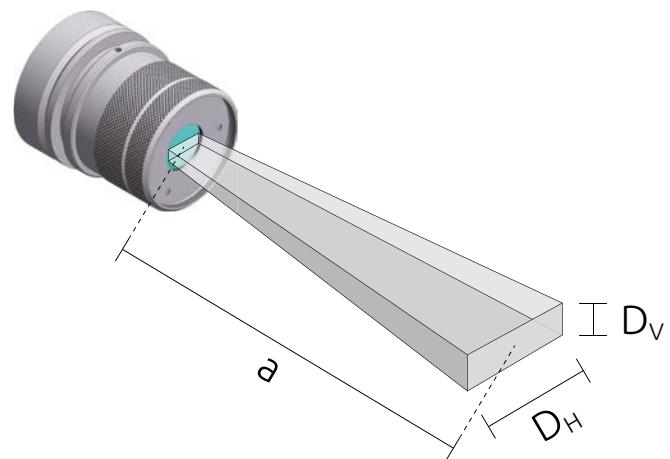
Measuring area

For pyrometers with focusable optics, the optical ratio D is defined as ratio of the measurement field over the measuring distance. The diameter of the measurement area at the focus distance results from the formula:

$$d = \frac{a}{D}$$



For models with rectangular field of view, the definition is extended to the horizontal D_H and vertical D_V optical ratio.



Supplementary lenses for CellaTemp PA, CellaTemp PX and CellaPort PT with round measuring area

Pyrometer		Lens	Supplementary lens							
Type		PZ 20/O-50	PZ 20/O-63		PZ 20/O-75		PZ 20/O-120			
			measuring distance [mm]	measurement field Ø in mm	measuring distance [mm]	measurement field Ø in mm	measuring distance [mm]	measurement field Ø in mm	measuring distance [mm]	measurement field Ø in mm
PA/PX 40 AF 4/7, 20 AF 1/5, 30 AF 1, 35 AF 1 PT 140 AF 4/7, 120 AF 1, 130 AF 1, 135 AF 1	PZ 20.01	36 - 41	0.35 - 0.45	45 - 54	0.40 - 0.60	52 - 63	0.45 - 0.70	84 - 112	0.70 - 1.10	
PA/PX 40 AF 5/8, 20 AF 2/6, 30 AF 2, 35 AF 2 PT 140 AF 5/8, 120 AF 2, 130 AF 2, 135 AF 2	PZ 20.03	31 - 36	0.30 - 0.40	38 - 45	0.35 - 0.50	43 - 52	0.40 - 0.60	66 - 84	0.55 - 0.90	
PA/PX 40 AF 6/9, 20 AF 3/7, 30 AF 3, 35 AF 3 PT 140 AF 6/9, 120 AF 3, 130 AF 3, 135 AF 3	PZ 20.06	41	0.30					101 - 112	0.55 - 0.67	
PA/PX 40 AF 14/15	PZ 20.08	34 - 41	0.50 - 0.67					77 - 112	1.00 - 1.60	
PA/PX 28 AF 10, 29 AF 10 PT 128 AF 10, 129 AF 10	PZ 20.08	34 - 41	1.28 - 1.75							
PA/PX 29 AF 21/22 PT 129 AF 21/22	PZ 20.01			45 - 54	1.05 - 1.50	52 - 63	1.20 - 1.75			
PA/PX 29 AF 23 PT 129 AF 23	PZ 20.06							101 - 112	1.43 - 1.75	
PA/PX 40 AF 1, 50 AF 1 PT 140 AF 1	PZ 20.01	36 - 41	0.65 - 0.90	45 - 54	0.80 - 1.10	52 - 63	0.90 - 1.40	84 - 112	1.30 - 2.10	
PA/PX 40 AF 2, 50 AF 2 PT 140 AF 2	PZ 20.03	31 - 36	0.60 - 0.80	38 - 45	0.70 - 1.00	43 - 52	0.80 - 1.10	66 - 84	1.10 - 1.70	
PA/PX 40 AF 3, 50 AF 3 PT 140 AF 3	PZ 20.06	41	0.55					101 - 112	1.10 - 1.40	
PA/PX 40 AF 20 PT 140 AF 20	PZ 20.08	36 - 41	1.45 - 2.00					77 - 112	2.10 - 3.45	
PA/PX 60 AF 1	PZ 20.08	36 - 41	1.05 - 1.45					77 - 112	3.00 - 4.80	

Supplementary lenses for CellaTemp PA/PX 43 and CellaPort PT 143 with rectangular measuring area

Pyrometer		Lens	Supplementary lens							
Type		PZ 20/O-50	PZ 20/O-63		PZ 20/O-75		PZ 20/O-120			
			measuring distance [mm]	measurement field Ø in mm	measuring distance [mm]	measurement field Ø in mm	measuring distance [mm]	measurement field Ø in mm	measuring distance [mm]	measurement field Ø in mm
PA/PX 43 AF 1 PT 143 AF 1	h v	PZ 20.01	36 - 41	1.20 - 1.60	45 - 54	1.40 - 2.00	52 - 63	1.60 - 2.40	84 - 112	2.40 - 3.80
				0.20 - 0.30		0.30 - 0.40		0.50		0.50 - 0.80
PA/PX 43 AF 2 PT 143 AF 2	h v	PZ 20.03	31 - 36	1.10 - 1.40	38 - 45	1.30 - 1.70	43 - 52	1.40 - 2.00	66 - 84	2.00 - 2.90
				0.20 - 0.30		0.30		0.30 - 0.40		0.60
PA/PX 43 AF 3 PT 143 AF 3	h v	PZ 20.06	41	1.00					101 - 112	1.90 - 2.40
				0.20						0.40 - 0.50
PA/PX 43 AF 13 PT 143 AF 13	h v	PZ 20.08	34 - 41	1.70 - 2.40					77 - 112	3.50 - 5.70
				0.30 - 0.50						0.70 - 1.10
PA/PX 43 AF 4/7 PT 143 AF 4/7	h v	PZ 20.01	35 - 41	1.00 - 1.40	45 - 54	1.30 - 1.80	52 - 63	1.40 - 2.10	84 - 112	2.10 - 3.40
				0.20		0.20 - 0.30		0.30 - 0.40		0.40 - 0.60
PA/PX 43 AF 5/8 PT 143 AF 5/8	h v	PZ 20.03	31 - 35	0.90 - 1.20	38 - 45	1.10 - 1.50	43 - 52	1.30 - 1.80	66 - 84	1.80 - 2.60
				0.20		0.20 - 0.30		0.20 - 0.30		0.40
PA/PX 43 AF 6/9 PT 143 AF 6/9	h v	PZ 20.06	41	0.90					101 - 112	1.70 - 2.10
				0.10						0.30
PA/PX 43 AF 14/15 PT 143 AF 14/15	h v	PZ 20.08	34 - 41	1.50 - 2.10					77 - 112	3.10 - 5.00
				0.30						0.50 - 0.80



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