



## Press release

### Technical data for ExoLens™ with optics by ZEISS

	Wide angle	Tele	Macro
Optical design	ZEISS Mutar	ZEISS Mutar	ZEISS Vario-Proxar
Aperture <sup>2)</sup>	ideal for $\varnothing_{EP} = 2\text{mm}$		
Focal length	18 mm <sup>3)</sup>	56 mm <sup>3)</sup>	40-80 mm
Magnification factor	0.6x	2.0x	-
Lens elements / groups	4 / 4	5 / 3	3 / 2
Focusing range	0.05m – infinity	0.36m – infinity	78-30mm
Image field (diag.) <sup>4)</sup>	100°	42°	not relevant
Coverage at close range (MOD) <sup>4)</sup>	$\varnothing$ 68mm	$\varnothing$ 273mm	$\varnothing$ 111,3 mm (far) $\varnothing$ 35,6 mm (close)
Magnification ratio at minimum object distance <sup>4)</sup>	0.088	0.022	0,055 (far) 0,172 (close)
Diameter (without / with lens shade)	44mm / 60mm	44mm / 52mm	34 mm / 39 mm
Length (without / with lens shade)	29mm / 38mm	33.5mm / 46.5mm	12.5mm / 23.2mm
Weight (without / with lens shade)	83g / 90g	91 g / 98 g	41 g / 48 g

Available brackets for smartphones

iPhone®<sup>1)</sup> 6, 6 Plus, 6s, 6s Plus

<sup>1)</sup> iPhone® is a trademark of Apple Inc.

<sup>2)</sup> EP = Entrance pupil diameter of mobile phone camera =  $f/(f\text{-number})$

<sup>3)</sup> focal length including mobile phone camera (35mm-equivalent focal length  $f = 28\text{mm}$ ), referring to 36x24 mm format

<sup>4)</sup> assumed mobile phone camera optical parameter: 35mm-equivalent focal length  $f = 28\text{mm}$ , sensor diameter  $\varnothing_{in} = 6\text{mm}$ , minimum optical distance MOD = 80mm, min. magnification  $\beta = 0.058$