Press Release

Technical data for the ExoLens lenses with optics by ZEISS

	Wide angle	Tele	Macro
Optics	ZEISS Mutar	ZEISS Mutar	ZEISS Vario-Proxar
Aperture[2)]	ideal for $Ø_{EP}$ = 2 mm		
Focal length	18 mm[3)]	56 mm[3)]	40–80 mm
Magnification factor	0.6x	2.0x	–
Lens elements/groups	4/4	5/3	3/2
Focusing range	0.05 m – infinity	0.36 m – infinity	78-30 mm
Image field (diag.) [4)]	100°	42°	75°
Coverage at close range (MOD)[4)]	dia. 68 mm	dia. 273 mm	Ø 111.3 mm (far) Ø 35.6 mm (close)
Magnification ratio at minimum object distance [4)]	0.088	0.022	0.055 (far) 0,172 (close)
Diameter (without/with lens shade)	44 mm/60 mm	44 mm/52 mm	34 mm/39 mm
Length (without/with lens shade)	29 mm/38 mm	33.5 mm/46.5 mm	12.5 mm/23.2 mm
Weight (without/with lens shade)	83 g/90 g	91 g/98 g	41 g/48 g
Available brackets for smartphones	iPhone®[1)] 6, 6 Plus, 6s, 6s Plus		

[1)] iPhone® is a trademark of Apple Inc.
[2)] EP = Entrance pupil diameter of smartphone camera = f-number
[3)] Equivalent focal length including smartphone camera referring to 35 mm format (36 x 24 mm): f = 28 mm
[4)] Assumed mobile phone camera optical parameter referring to 35 mm format equivalent focal length f = 28 mm, sensor diameter $Ø_{im}$ = 6 mm, minimum optical distance MOD = 80 mm, min. magnification β = 0.058