



**Fix Objektiv mit langem
Arbeitsabstand:**

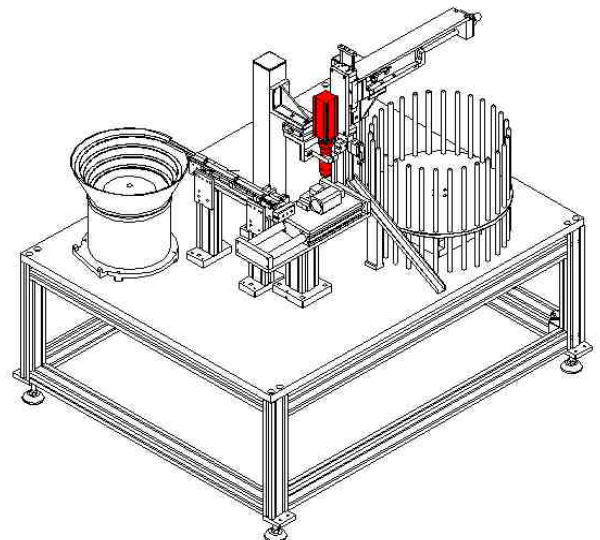
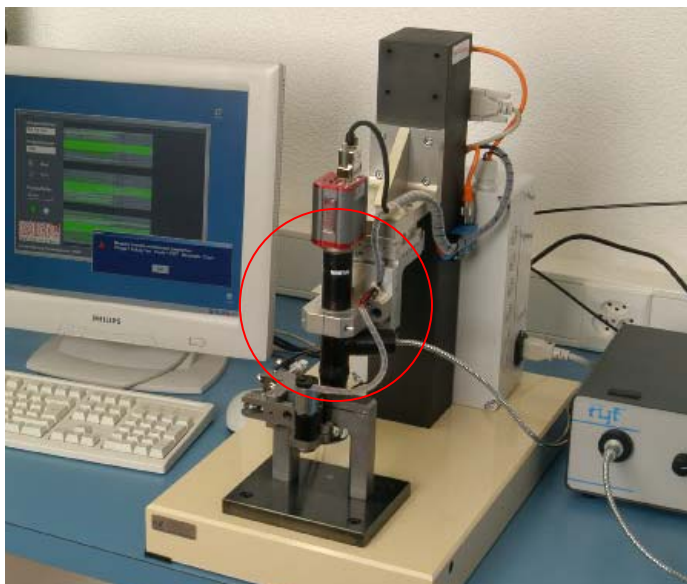
Objektive für Vision Kamera Systeme in der Automation, Maschinenbau, Mikroelektronik, Kontrolle und Uhrenindustrie:

- Hochauflösende Optik mit Fixfokus
- Parfokale Vergrößerungen 12,5x – 300x
- Arbeitsabstand von 36 – 356mm
- Modularer Aufbau für erhöhte Flexibilität
- Kompakter Aufbau: L=100mm / D=27mm
- Solide Industrieausführung (Alu eloxiert)
- Adapter für c- Mount Kameraanschluss
- Koaxiale Beleuchtung möglich
- Mit Fein-Fokussiereinrichtung

Objectif fixe longue distance

Objectifs pour les systèmes-caméras de visualisation, pour les applications dans les domaines de l'auto-matisation, de la construction de machines, de la microélectronique, de l'assurance qualité et de l'industrie horlogère :

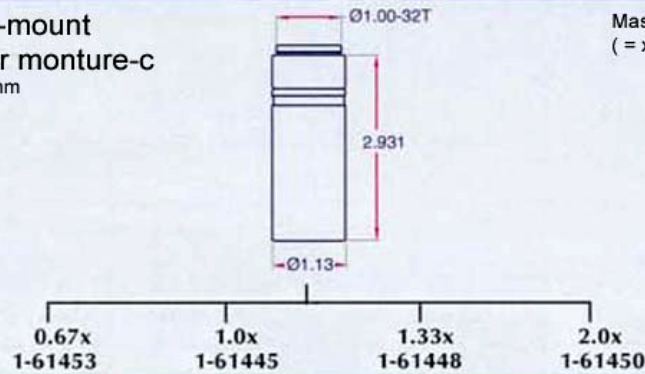
- *optique haute résolution avec réglage du foyer fixe*
- *grossissement 12,5x – 300x, parfocal*
- *distance de travail de 36 – 356 mm*
- *conception modulaire pour une flexibilité accrue*
- *construction compacte: L=100 mm / D= 27 mm*
- *version industrielle robuste (en aluminium éloxé)*
- *adaptateur pour branchement de caméras c-mount*
- *possibilité d'éclairage coaxial*
- *dispositif de focalisation fine*



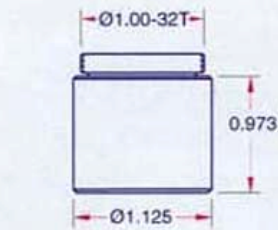
Aufbau und Abmessungen / montage et dimensions:

Tuben mit Adapter / c-mount
 tubes avec adaptateur montage-c
 Durchmesser / diamètre = 31,8mm

Masse in Zoll / Unité de mesure en pouce
 (= x25,4 = mm)

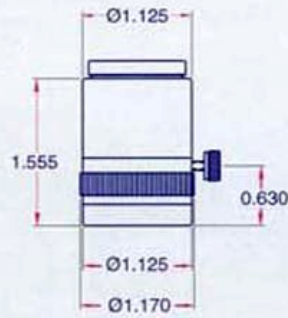


Objektive objectifs



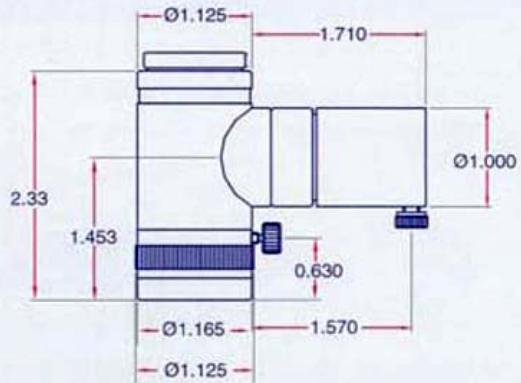
ohne Fokussierung
 sans focalisation

1-61456



mit 3mm Fokussierung / mise au point 3mm

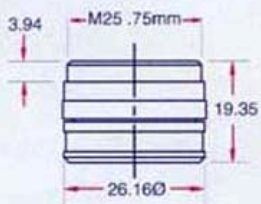
1-61449



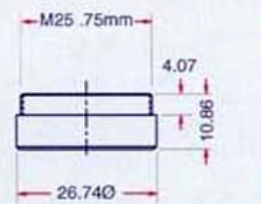
mit Coaxial Anschluss / avec connexion coaxiale

1-61446

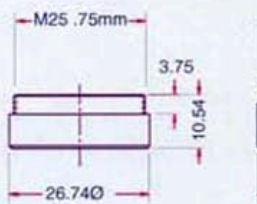
Vorsatzlinsen / Lentilles additionelles



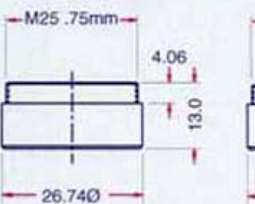
0.25X
 1-6044



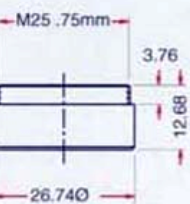
0.5X
 1-60110



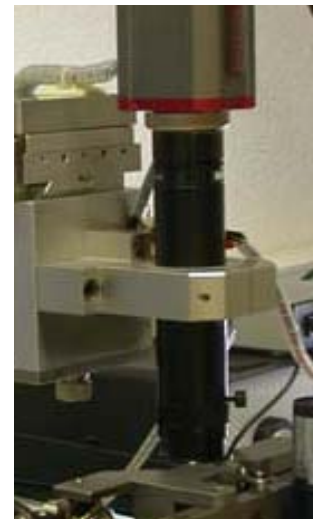
0.75X
 1-60111



1.5X
 1-60112



2.0X
 1-60113



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 C'est avec plaisir que nous vous assisterons à résoudre vos problèmes
 d'optique et d'éclairage. Demandez notre catalogue. www.ryfag.ch

Available Parts – Komponenten - composants

Lenses – Objektive - objectifs

Part #	Description
1-61449	Fine Focus Body Tube
1-61446	Fine Focus x/Coax Body Tube
1-61456	Non Fine Focus Body Tube
1-61517	Inf. Corrected Obj. Coupler Non F.F.
1-61521	Inf. Corrected Obj. Coupler 3mm F.F.
1-61522	Inf. Corrected Obj. Coupler 3mm F.F. and Co-Axial
3-61519	Mitutoyo Coupler M26 x 36T
3-61520	Nikon Coupler .800 x 36T RMS
1-61530	R/A Non Fine Focus Body Tube
1-61535	R/A Fine Focus Body Tube
1-61537	R/A Fine Focus Body Tube w/Co-Axial Body Tube

Adapters – Adapter -adapter

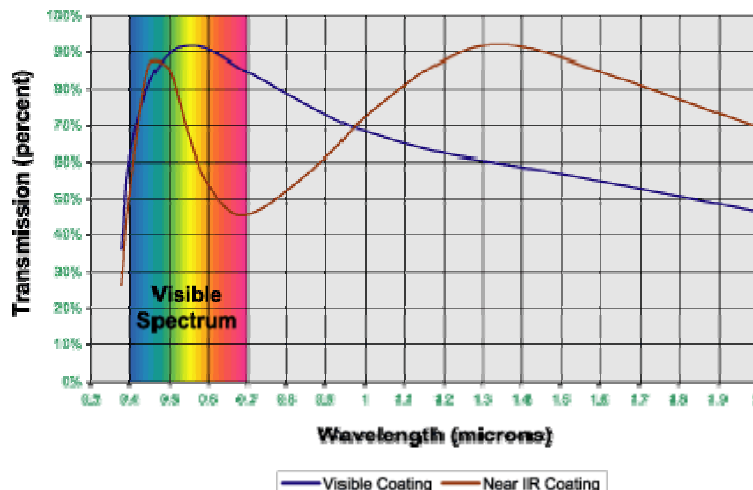
Part #	Description
1-61453	0.67x Standard Adapter
1-61445	1x Standard Adapter
1-61448	1.33x Standard Adapter
1-61450	2x Standard Adapter
1-61510	Mounting Clamp

Lens Attachments – Vorsatzlinsen – lentille additionelle

Part #	Description
1-6044	0.25x Lens Attachment
1-60110	0.5x Lens Attachment
1-60111	0.75x Lens Attachment
1-60112	1.5x Lens Attachment
1-60113	2x Lens Attachment

Infinity Corrected Objectives – unendlich korrigierte Objektiv

Part #	Description
8-60758	2x ICO 0.055 NA and 32 mm Working Distance
1-60226	5x ICO 0.14 NA and 32 mm Working Distance
1-60227	10x ICO 0.28 NA and 33 mm Working Distance
1-60228	20x ICO 0.42 NA and 20 mm Working Distance
1-60229	50x ICO 0.55 NA and 13 mm Working Distance



- Precise Eye Field of View Matrix (in mm at nominal working distance)
- Gesichtsfeld (in mm mit Arbeitsabstand)
- champs de vision (en mm avec distance de travail nominal)

Lens Attachment	W.D. / A.A. / distance (mm)	Camera Format & Parameters	0.67X Adapter 1-61453	1.0X Adapter 1-61445	1.33X Adapter 1-61448	2.0X Adapter 1-61450
0.25X 0.018 N.A. DOF 3.16 mm 1-6044	356 (nominal)	Mag.	0.30X	0.45X	0.60X	0.9X
		Field 1/4"	10.7(h) 8.0(v)	7.1(h) 5.3(v)	5.3(h) 4.0(v)	3.6(h) 2.7(v)
	300-370 (1) W.D. range	Field 1/3"	15.9(h) 11.9(v)	10.7(h) 8.0(v)	8.0(h) 6.0(v)	5.3(h) 4.0(v)
		Field 1/2"	21.2(h) 15.9(v)	14.2(h) 10.7(v)	10.6(h) 8.0(v)	7.1(h) 5.3(v)
		Field 2/3"	29.2(h) 21.9(v)	19.6(h) 14.7(v)	14.7(h) 11.0(v)	9.8(h) 7.3(v)
0.5X 0.035 N.A. DOF 0.78 mm 1-60110	175 (nominal)	Mag.	0.60X	0.90X	1.2X	1.8X
		Field 1/4"	5.3(h) 4.0(v)	3.6(h) 2.6(v)	2.7(h) 2.0(v)	1.8(h) 1.3(v)
	170-190 (1) W.D. range	Field 1/3"	8.0(h) 6.0(v)	5.3(h) 4.0(v)	4.0(h) 3.0(v)	2.7(h) 2.0(v)
		Field 1/2"	10.6(h) 8.0(v)	7.1(h) 5.3(v)	5.3(h) 4.0(v)	3.6(h) 2.7(v)
		Field 2/3"	14.7(h) 11.0(v)	9.8(h) 7.3(v)	7.3(h) 5.5(v)	4.9(h) 3.7(v)
0.75X 0.054 N.A. DOF 0.35 mm 1-60111	113 (nominal)	Mag.	0.90X	1.4X	1.8X	2.7X
		Field 1/4"	3.6(h) 2.7(v)	2.3(h) 1.8(v)	1.8(h) 1.3(v)	1.2(h) 0.9(v)
	110-120 (1) W.D. range	Field 1/3"	5.3(h) 4.0(v)	3.6(h) 2.7(v)	2.7(h) 2.0(v)	1.8(h) 1.3(v)
		Field 1/2"	7.1(h) 5.3(v)	4.7(h) 3.6(v)	3.6(h) 2.7(v)	2.4(h) 1.8(v)
		Field 2/3"	9.8(h) 7.3(v)	6.5(h) 4.9(v)	4.9(h) 3.7(v)	3.3(h) 2.4(v)
None 0.070 N.A. DOF 0.20 mm	92 (nominal)	Mag.	1.2X	1.8X	2.4X	3.6X
		Field 1/4"	2.7(h) 2.0(v)	1.8(h) 1.3(v)	1.3(h) 1.0(v)	0.9(h) 0.7(v)
	90-93 (1) W.D. range	Field 1/3"	4.0(h) 3.0(v)	2.7(h) 2.0(v)	2.0(h) 1.5(v)	1.3(h) 1.0(v)
		Field 1/2"	5.3(h) 4.0(v)	3.6(h) 2.7(v)	2.7(h) 2.0(v)	1.8(h) 1.3(v)
		Field 2/3"	7.3(h) 5.5(v)	4.9(h) 3.7(v)	3.7(h) 2.8(v)	2.4(h) 1.8(v)
1.5X 0.104 N.A. DOF 0.1 mm 1-60112	51 (nominal)	Mag.	1.8X	2.7X	3.6X	5.4X
		Field 1/4"	1.8(h) 1.3(v)	1.2(h) 0.9(v)	0.9(h) 0.7(v)	0.6(h) 0.4(v)
	49-51 (1) W.D. range	Field 1/3"	2.7(h) 2.0(v)	1.8(h) 1.3(v)	1.3(h) 1.0(v)	0.9(h) 0.7(v)
		Field 1/2"	3.6(h) 2.7(v)	2.4(h) 1.8(v)	1.8(h) 1.3(v)	1.2(h) 0.9(v)
		Field 2/3"	4.9(h) 3.7(v)	3.3(h) 2.4(v)	2.4(h) 1.8(v)	1.6(h) 1.2(v)
2.0X 0.141 N.A. DOF 0.05 mm 1-60113	36 (nominal)	Mag.	2.4X	3.6X	4.8X	7.2X
		Field 1/4"	1.3(h) 1.0(v)	0.9(h) 0.7(v)	0.7(h) 0.5(v)	0.5(h) 0.3(v)
	35-36 (1) W.D. range	Field 1/3"	2.0(h) 1.5(v)	1.3(h) 1.0(v)	1.0(h) 0.8(v)	0.7(h) 0.5(v)
		Field 1/2"	2.7(h) 2.0(v)	1.8(h) 1.3(v)	1.3(h) 1.0(v)	0.9(h) 0.7(v)
		Field 2/3"	3.7(h) 2.78(v)	2.4(h) 1.8(v)	1.8(h) 1.4(v)	1.2(h) 0.9(v)

(1) Working distance range when using 3 mm fine focus. Field of view will change with shorter or longer working distances. For more information please call Ryf AG 032 654 21 00 or 022 776 82 28

