

WFS Camera Head space requirements

Reference axis

Interface on WFS Camera bracket

M5 x7,5mm HeliCoil (4x)

Attention:

- 1 - space for connectors defined by cooling distribution design hose -, cable length defined by application (customised)
- 2 - cooling fluid in (connector type Rectus serie 25KB TF09 RVX)
- 3 - cooling fluid return (connector type Rectus serie 25SB TF09 RVX)
- 4 - space reserved for entrance window and objective
- 5 - different WFS Camera Heads are feasible (see table)
- 6 - observe necessary access to screws for WFS Camera Head installation

Tolerances:

- parallelity lenslet / CCD $\pm 1,2^\circ$
- distance lenslet / CCD $\pm 0,1\text{mm}$
- parallelity reference plate / lenslet $\pm 3\text{arcmin}$

Table 1: Camera Head Specifications

GRAAL LGS WFS	GRAAL MCM WFS	GRAAL TT-NGS WFS	GALACSI LGS WFS	GALACSI TT-NGS WFS	SPHERE	Remarks
4,79mm	4,79mm	no lenslet	4,79mm	no lenslet	TBD	Lenslet distance X to CCD surface
1,5mm	1,5mm	1,5mm	1,5mm	1,5mm	1,5mm	Lenslet substrate thickness
22+/-0,5mm	22+/-0,5mm	22+/-0,5mm	22+/-0,5mm	22+/-0,5mm	22+/-0,5mm	CCD surface reference plate distance
Entrance window	Entrance window	Objective	Entrance window	TBD	TBD	

Table 2: Revision History

REV	DATE	APPROVED	DESCRIPTION
1	--/--/----		ICD version
2	--/--/----		---
3	28/03/2008		not distributed

Table 3: Project Information

VLT PROJECT		General Tolerances (mm)	Scale:	Project/Product Item:		WP
		DIN ISO 2768 -m/K	(1:2) 2:1,1:1	14850		885
 EUROPEAN SOUTHERN OBSERVATORY Karl-Schwarzschild Str. 2 D-85748 Garching bei München www.eso.org Copyright reserved acc. ISO 16016		Drawn: 31/01/2008	Date:	Description:		LGS-WFS Camera Head Interface definition sheet 1 (applicable for all WFS Camera Head designs) assembly see next sheets
		Designed: 30.01.2007	Name:			
		Checked:				
		Status:	Drawing Number:		Sheet of Sheets 1 / 3	
				VLT-DWG-ESO-14850-0-131000		A2

- 1 -
space for connectors defined by cooling distribution design
hose -, cable length defined by application (customised)
- 2 -
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- 3 -
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- 4 -
space reserved for entrance window and objective
- 5 -
different WFS Camera Heads are feasible (see table)
- 6 -
observe necessary access to screws for WFS Camera Head
installation

- parallelity lenslet / CCD $\pm 1,2^\circ$
- distance lenslet / CCD $\pm 0,1\text{mm}$
- parallelity reference plate / lenslet $\pm 3\text{arcmin}$

Filename: VLT-ESO-14850-0-131000.idw				Part Revision Number : 0	
Drawing Revision Number : 3					
Material:		Surface:		Edges:	
				Roughness:	
				Weight: (Kg.) 3.63 kg	
 VLT PROJECT		General Tolerances(mm) DIN ISO 2768 -m/K		Scale: (1:2) 2:1,1:1	
				Project/Product Item: 14850	
				WP 885	
		Date: 31/01/2008		Name: fnittel	
		Drawn: 31/01/2008		rconzeltm	
		Designed: 30.01.2007			
		Checked:			
		Status:			
		Description: LGS-WFS Camera Head Interface definition sheet 1 (applicable for all WFS Camera Head designs) assembly see next sheets			
EUROPEAN SOUTHERN OBSERVATORY Karl-Schwarzschild Str. 2 D-85748 Garching bei München www.eso.org Copyright reserved acc. ISO 16016		Drawing Number: VLT-DWG-ESO-14850-0-131000		Sheet of Sheets 1 / 3	

Filename: VLT-ESO-14850-0-131000.idw				Part Revision Number : 0	
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				Roughness:	
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 VLT PROJECT		General Tolerances(mm) DIN ISO 2768 -m/K		Scale: (1:2) 2:1,1:1	
		Project/Product Item: 14850			WP 885
		Date: 31/01/2008		Name: fnittel	
		Drawn: 30.01.2007		rconzeltm	
		Designed: 30.01.2007		rconzeltm	
		Checked: 			
		Status: 		Description: LGS-WFS Camera Head Interface definition sheet 1 (applicable for all WFS Camera Head designs) assembly see next sheets	
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