Variable focal lengths with the Hyperion 2" Finetuning Rings (FTR) 14 und 28 mm

also with 2" Baader eyepiece filters

Hyperion eyepiece with FTR 14 and 28 mm

Hyperion eyepiece with FTR 14mm (this combination is also portrayed in the picture below which features the 2" mirror star diagonal).

Available combinations of Hyperion eyepieces with Finetuning Rings or 2" Baader Filter to modify the focal length and the field of view.

Effective focal lengh in mm		∅ Field-stop mm	with 14 mm FTR		with 28 mm FTR		with 14 + 28 mm FTR		with 2" Baader Filter *		without first group of lenses	
Hyperion	**21.0**	**22.5**	17.6	19.9	15.5	17.5	14.0	15.8	18.5	20.6	32.2	35.0
Hyperion	**17.0**	**20.9**	13.1	17.1	10.8	14.1	9.2	12.1	14.6	18.7	21.8	30.0
Hyperion	**13.0**	**17.7**	10.8	14.6	9.2	12.5	8.1	11.0	11.7	14.2	22.9	30.0
Hyperion	**8.0**	**10.7**	6.0	8.6	5.0	7.1	4.3	6.1	6.9	9.3	21.8	30.0
Hyperion	**5.0**	**6.5**	4.0	5.4	3.2	4.5	2.6	3.9	4.3	5.8	22.5	30.0
Hyperion	**3.5**	**4.3**	2.5	3.5	2.1	2.9	1.8	2.5	2.9	3.7	21.8	30.0

*Baader 2" eyepiece filter with a height of 8 mm. Yellow column of the table: focal length, Light-Grey column: diameter of the field stop

Hyperion eyepiece with built-in 2" eyepiece filter (e.g. Infrared-Blocking-Filter # 2459210 A)

A variety of additional Hyperion focal lengths can be obtained at very moderate prices by using our 2" Finetuning Extension Rings 14 and 28 mm, or even our 2" eyepiece filters. Thus an eyepiece of 3.5 mm focal length can be converted into one of 1.8 mm focal length – without loss of sharpness – above all, because no additional lenses are introduced into the beam, which is unavoidable when using a Barlow lens.
For marginal cost such experimentation is possible. You will discover how much your telescope can achieve, exceeding the recommended range of magnification without an additional Barlow lens. You will experience surprising results especially with refractors! With real apochromats the usable exit pupil may be considerably smaller than the literature recommends!

Hyperion eyepiece with 11/4" barrel unscrewed

Finetuning 2" Extension Ring 28 mm # 2958228

Finetuning 2" Extension Ring 14 mm # 2958214

2" Stop Ring with captive brass locking ring and two locking screws # 2958027

Front Hyperion lens element, built into the 11/4" barrel.

Hyperion eyepiece

2" Stop ring #2958027

Finetuning Ring 14 mm #2958214

11/4" Hyperion barrel with built-in negative lens group

The M 48 filter thread is located here!

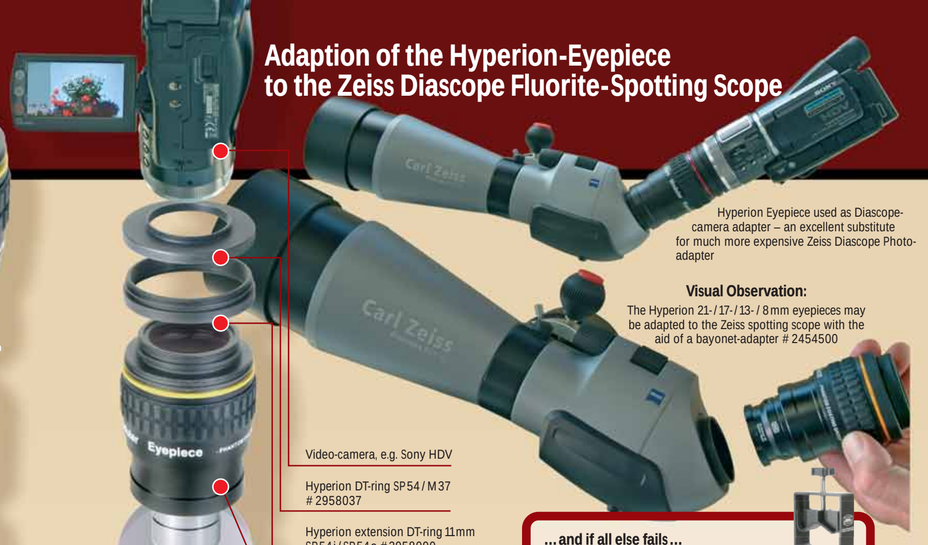
To remove the first group of lenses, all Hyperion eyepieces must only be opened here.

Disassembling the eyepiece elsewhere will void the warranty!

Combination of the Hyperion eyepiece and the 14 mm Finetuning Ring as well as the 2" stop ring.

The stop ring prevents the eyepiece barrel from hitting the mirror star diagonal or prism.

Adaption of the Hyperion-Eyepiece to the Zeiss Diascope Fluorite-Spotting Scope



Video-camera, e.g. Sony HDV

Hyperion DT-ring SP54 / M37 # 2958037

Hyperion extension DT-ring 11mm SP54i / SP54a # 2958090

Hyperion Eyepiece

11/4" Baader Diascope bayonet-adapter # 2454500 with built-in captive brass locking ring – slipped over and fastened onto the chromium-plated eyepiece barrel

Carl Zeiss Diascope 85T*FL

Hyperion Eyepiece used as Diascope-camera adapter – an excellent substitute for much more expensive Zeiss Diascope Photo-adapter

Visual Observation:

The Hyperion 21- / 17- / 13- / 8 mm eyepieces may be adapted to the Zeiss spotting scope with the aid of a bayonet-adapter # 2454500

…and if all else fails…

For example if you want to use a small digital camera without lens thread for afocal projection-photography… why not use our Baader-Microstage 6030 (# 2450333) – it will solve every adaptation problem!

The Baader Microstage 6030 is a very economic clamping eyepiece-holder for all eyepieces with diameters from 30 to 62 mm. It is connected to a stage that is adjustable in all directions, similar to an adjustable microscope x / y stage, so that (almost) any small digital camera can be mounted and optically centered behind the eyepiece.

21 mm # 2454621
17 mm # 2454617
13 mm # 2454613
8 mm # 2454608
5 mm # 2454605
3.5 mm # 2454603

The complete Hyperion Eyepieces series at a glance:

We offer economic Set-prices for Hyperion eyepiece-pairs (2 eyepieces of the same focal length) as well as for the complete Set of all 6 Hyperion Eyepieces.

Please ask for it.

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Much more than an eyepiece

HYPERION®-eyepieces

How to use the modular eyepiece system – illustrated instructions for the whole range of Hyperion accessories

Sturdy gift box

Each boxed Hyperion eyepiece includes the following items:

The Soft Leather Bag allows exceptional protection of the eyepiece within your eyepiece-case in a minimum amount of space!

The 68° Hyperion eyepiece which features two barrel diameters to fit both 2" and 11/4", with Phantom-Group Multicoating and two photographic threads M 43 and SP 54

A dust cap with diameter of 11/4" (31.7 mm)

Two dust caps with inner diameters of 48 mm and 45 mm

11/4" barrel with safety groove and filter thread, suitable for all 11/4" eyepiece-filters, as well as for the Baader 11/4" extension tube (# 1905130)

The two dust caps:

All Hyperion eyepieces are equipped with two dust caps which protect the eye lens side. This leaves you the choice of storing the eyepiece protected from dust with rubber eye cap folded down (especially for persons who wear glasses) or folded up.

System-threads M 43 and SP 54

The Hyperion threads are located beneath the rubber eye cap, or rather beneath the thread-protecting ring (made of high-quality and aging-resistant silicone rubber).
The large number of Baader adapting rings allows use of the Hyperion eyepiece for (almost) every task in astronomical – and nature – photography as a high-quality projection optic or as a tele-extender.

The following pages describe in detail many of the adaptations and variations that are possible with the Hyperion system.

1 System thread M 43

2 System thread SP 54