

List of Lenses

Camera lens series

P/N	Sensor size	focus f [mm]	F/No.	Angle of view [°] *1			TV Distortion	Optical length [mm] *2	Construction	Mount [mm] *3	Holder *4
				Vertical	Horizontal	Diagonal					
HPB2010	"1/4	4.80	2.6	34	44	52	-1%	11.0	2P	M12 × P0.5	Standard
HPB1007		2.90	2.0	54	74	94	-17%	21.2	4G		
HPB2033		2.20	2.0	72	93	112	-16%	15.1	2P		
4N256		2.09	2.3	69	88	103	-4%	11.2	2P		
HPB1027		1.95	2.2	94	126	168	-39%	20.1	6G		
DW178720 *6		1.8	2.0	88.1	118.8	151.4	-23.1%	21.8	7G		
CAR-12		1.7	2.5	94	128	167	-36%	14.2	2P3G		
HPB3041_C4		1.19	2.4	99	119	134	-9%	13.9	2P2G		
HPB3041_C7 *6		1.19	2.4	99	119	134	-9%	13.9	2P2G		
4N321		1.05	2.0	142	194	206	±5%	11.8	4P1G		
4K269	0.82	2.6	156	191	195	+2%	12.5	5P	M9 × P0.5	Custom *5	
4N313	"1/3.7	1.12	2.2	110	136	167	-16%	9.6	3P		M8 × P0.5
DW9607CM	"1/3	6.00	2.0	30	40	53	-1%	19.5	4G	M12 × P0.5	Standard
DW9305CM		4.30	1.8	47	64	78	-8.6%	17.3	5G		
HPB1014		3.80	2.4	54	74	96	-11%	22.3	4G		
HPB1047		2.50	2.8	66	118	137	-26%	22.9	6G		
HPB1047_C1 *7		2.50	2.8	66	118	137	-26%	22.9	6G		
HPB1022		2.50	2.5	84	116	152	-34%	18.1	6G		
HPB1033		2.30	2.6	91	124	160	-24%	16.8	6G		
AS133		2.09	2.0	89	115	137	-11%	18.0	3P3G		
BW3ML56B	"1/2.8	5.60	2.0	38	50	61	+0.6%	22.2	8G	M12 × P0.5	Standard
HPB1005_B3	"1/2	9.30	2.8	33	43	53	-2%	14.5	5G		
HPB1005_D2	"1/2	9.30	8.0	33	43	53	-2%	14.5	5G		

*1 Angle of view in the table is the view angle correspond to the Sensor size in the table. View angle will be smaller when installed smaller size sensor than correspond sensor.

*2 Optical length: Please refer to the right figure.

*3 Please contact us for C/CS mount.

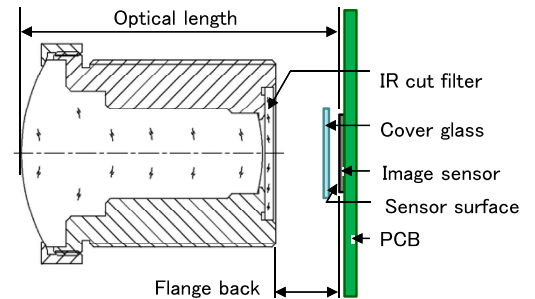
*4 Suitable lens holder sometimes differs depend on lens. Please contact us.

*5 Necessary of custom development of lens holder.

*6 With visible light cut filter.

*7 HPB1047_B6_C1 is without IR cut filter.

※ IR: Please contact us because some items are not available for IR.



Development example: Custom Camera/System

Camera specification			Application	Feature/Remark
Number of pixels	Output format	I/F		
VGA (640 x 480)	Digital (YUV)	USB2.0	Wearable terminal	Compact (10x10mm)
NTSC (720 x 480)	NTSC/PAL	Custom	Medical	Compact (φ 17mm cylinder)
720p (1280 x 720)	Digital/MJPEG	HDMI/USB3.0	Automotive (for evaluation use)	HDR/NIR(near infrared)
SXGA (1280 x 1024)	H.264	Ethernet (RTSP)	Security system	PTZ, Multiple camera interlocking drive
SXGA (1280 x 1024)	Digital (RGB-Raw)	USB2.0	Robot	Global shutter, Stereo camera
SXGA (1280 x 1024)	YUV, MJPEG	IEEE802.11ac	Industrial use	Battery operated, WLAN
2M (2048 x 1088)	Digital (Raw)	LVDS (@340fps)	Automotive (for evaluation use)	High resolution, High frame rate
5M (2592 x 1944)	Digital (YUV)	GigE	Industrial use	PTZ, Multiple camera interlocking drive
1G (10Mp x 100)	Digital (YUV)	USB3.0	Industrial use	Camera array