

PENTAX lens

# smc-DA\*

Code no.	21650
Barcode	0027075129252

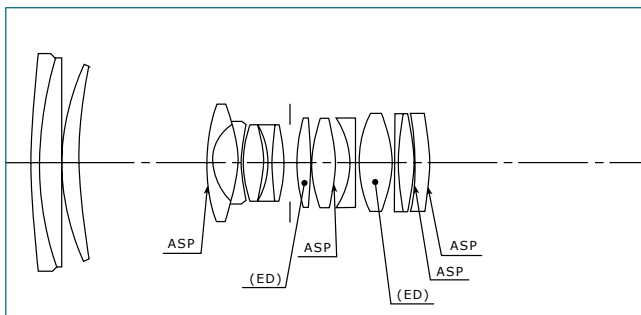
16–50mm f/2.8 ED AL [IF] SDM



- > Super fast autofocus through ultra-sonic technology
- > Completely protected against spray and dust
- > Metal bayonet mount
- > Quick Focus for instant switching to manual focus control
- > New "Super Protection" coating for protecting the front lens element against dirt and grime



The "DA Star" series opens a new chapter in PENTAX lens history. The critical capability characteristics include an extremely fast "Supersonic Motor" incorporating ultrasonic technology and a housing that is completely sealed against water and dust. The smc-DA\* 16–50 mm is the ultimate standard zoom. The continuous f/2.8 aperture provides for the necessary reserves needed in poor light conditions. And for optimal operational convenience the "Quick Shift Focus System" is again provided, enabling the user to instantly take manual control of the focusing. Rounding out the intelligent design of the new the Star series lens is the proprietary PENTAX SP coating that reliably protects the lens against pollution.



Standard Accessories	
Lens cap O-LC77	Code No. 21650
Rear cap	Code No. 31006
Lens Hood PH-RBJ77	Code No. 38753
Soft bag S100-140	Code No. 33945

Packaging
Dimensions (W×H×D): 158×153×188mm
Weight: 1,100g

Lens	smc-DA* 16–50mm f/2,8 ED AL [IF] SDM
Lens mount	PENTAX K <sub>AF2</sub> bayonet
Angle of view	83°–31.5°
Construction	15 elements/12 groups
Aperture control	Automatic
Smallest aperture	22
Metering	TTL open aperture metering
Minimum focusing distance	0.30m
Magnification	0.21x
Filter size	77mm

# DEPTH OF FIELD TABLE

f = 16mm

F	2.8	4.0	5.6	8.0	11.0	16.0	22.0
Metre							
0.3	0.290 0.311	0.286 0.317	0.281 0.324	0.274 0.336	0.265 0.353	0.253 0.388	0.241 0.446
0.5	0.462 0.547	0.447 0.571	0.430 0.608	0.407 0.674	0.382 0.786	0.349 1.117	0.318 2.513
0.7	0.618 0.813	0.589 0.875	0.556 0.977	0.513 1.194	0.470 1.683	0.415 6.290	0.368 ∞
1.0	0.828 1.278	0.773 1.457	0.712 1.803	0.638 2.856	0.567 12.235	0.483 ∞	0.415 ∞
2.0	1.371 3.857	1.213 6.564	1.055 163.067	0.887 ∞	0.745 ∞	0.596 ∞	0.488 ∞
∞	3.969 ∞	2.808 ∞	2.034 ∞	1.453 ∞	1.084 ∞	0.776 ∞	0.591 ∞

f = 20mm

F	2.8	4.0	5.6	8.0	11.0	16.0	22.0
Metre							
0.3	0.293 0.308	0.290 0.312	0.286 0.317	0.280 0.325	0.274 0.335	0.264 0.356	0.254 0.386
0.5	0.472 0.532	0.462 0.547	0.448 0.569	0.430 0.607	0.410 0.663	0.381 0.791	0.352 1.048
0.7	0.641 0.774	0.619 0.811	0.592 0.867	0.557 0.971	0.519 1.148	0.469 1.684	0.422 4.168
1.0	0.875 1.174	0.831 1.270	0.780 1.430	0.715 1.771	0.649 2.557	0.566 11.375	0.495 ∞
2.0	1.521 2.965	1.382 3.760	1.234 5.906	1.067 47.878	0.916 ∞	0.747 ∞	0.618 ∞
∞	5.808 ∞	4.094 ∞	2.951 ∞	2.094 ∞	1.546 ∞	1.094 ∞	0.821 ∞

f = 28mm

F	2.8	4.0	5.6	8.0	11.0	16.0	22.0
Metre							
0.3	0.296 0.305	0.294 0.307	0.291 0.309	0.288 0.314	0.284 0.319	0.277 0.329	0.270 0.342
0.5	0.484 0.517	0.478 0.525	0.470 0.535	0.458 0.552	0.445 0.576	0.424 0.620	0.402 0.685
0.7	0.667 0.737	0.653 0.755	0.637 0.780	0.613 0.821	0.587 0.879	0.548 1.000	0.509 1.205
1.0	0.929 1.084	0.902 1.125	0.868 1.186	0.822 1.291	0.772 1.453	0.702 1.851	0.635 2.796
2.0	1.716 2.403	1.619 2.633	1.505 3.022	1.364 3.892	1.222 3.892	1.045 295.272	0.893 ∞
∞	11.254 ∞	7.902 ∞	5.668 ∞	3.992 ∞	2.926 ∞	2.037 ∞	1.504 ∞

f = 35mm

F	2.8	4.0	5.6	8.0	11.0	16.0	22.0
Metre							
0.3	0.297 0.303	0.296 0.305	0.294 0.307	0.291 0.309	0.286 0.313	0.283 0.320	0.278 0.328
0.5	0.489 0.511	0.485 0.516	0.479 0.523	0.471 0.534	0.461 0.549	0.445 0.574	0.428 0.610
0.7	0.677 0.724	0.668 0.736	0.656 0.751	0.639 0.775	0.619 0.809	0.589 0.872	0.557 0.963
1.0	0.952 1.054	0.933 1.079	0.908 1.114	0.875 1.172	0.836 1.172	0.779 1.423	0.721 1.703
2.0	1.806 2.243	1.734 2.368	1.647 2.557	1.533 2.909	1.411 3.518	1.248 5.442	1.098 16.366
∞	17.563 ∞	12.317 ∞	8.819 ∞	6.195 ∞	4.526 ∞	3.135 ∞	2.300 ∞

f = 50mm

F	2.8	4.0	5.6	8.0	11.0	16.0	22.0
Metre							
0.3	0.298 0.302	0.297 0.303	0.296 0.304	0.294 0.306	0.292 0.308	0.289 0.312	0.285 0.317
0.5	0.494 0.507	0.491 0.509	0.487 0.513	0.482 0.519	0.476 0.527	0.466 0.541	0.454 0.558
0.7	0.687 0.714	0.682 0.720	0.674 0.728	0.664 0.741	0.652 0.757	0.632 0.787	0.610 0.825
1.0	0.973 1.029	0.962 1.042	0.947 1.060	0.926 1.088	0.901 1.125	0.863 1.193	0.821 1.288
2.0	1.891 2.123	1.848 2.181	1.793 2.263	1.717 2.399	1.631 2.594	1.507 3.004	1.381 3.714
∞	33.703 ∞	23.609 ∞	16.881 ∞	11.834 ∞	8.623 ∞	5.946 ∞	4.341 ∞

## Viewing angle smc-DA\* 16-50mm f/2,8 ED AL [IF] SDM

■ Angle-of-view for digital cameras



15mm



21mm



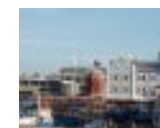
24mm



43mm



50mm



75mm



120mm



140mm



180mm



200mm



300mm



600mm

# PENTAX