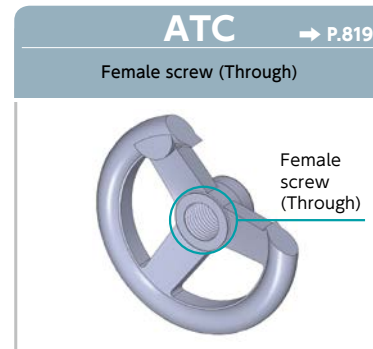
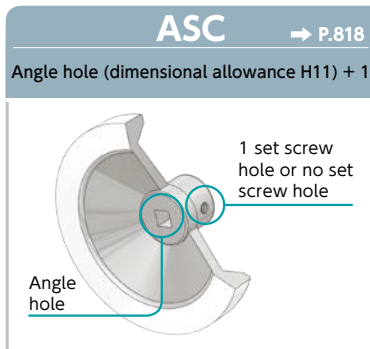
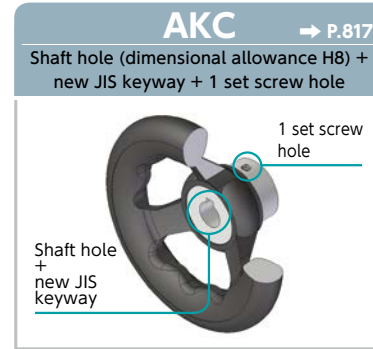
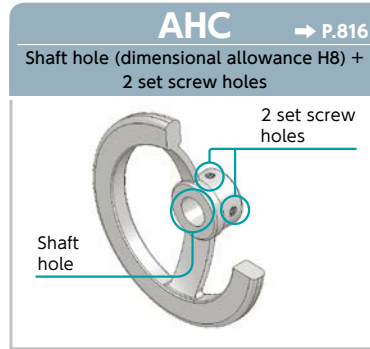


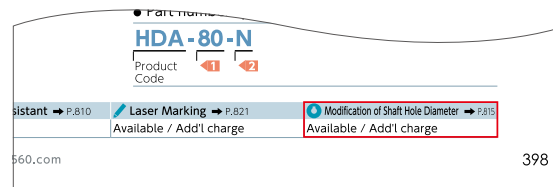
Service description

- Handle shaft hole will be processed.
- There are five processing types. Please select a desirable service according to your application.
- For details on dimensions, please refer to the processing type page. → P.816 - 819



Target product

- Products in handwheel category (→ P.393 - 405) are the target.
- Available / Add'l charge is displayed at the end of each product page for the target product.



- Target products vary depending on processing types. Please refer to the detailed page for each processing type. → P.816 - 819

Price • Delivery

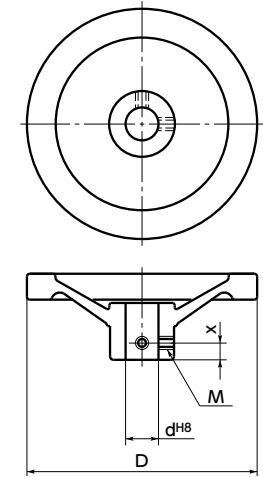
- Please feel free to contact us.

AHC Shaft hole (dimensional allowance H8) + 2 set screw holes

- Shaft hole (H8) and 2 set screw holes will be processed.

AHC Target product

Hub Material	Product Code			
Cast iron	PH (→ P.397)	HSN (→ P.402)	D (→ P.403)	F (→ P.404)
Aluminum	HDA (→ P.398)	AV (→ P.400)	AH (→ P.401)	
Stainless Steel	PHS (→ P.397)	HSM (→ P.399)		



Dimension

- As for bore diameter d, its minimum and maximum bore diameters are set based on nominal handwheel sizes. Please specify d within the range. d can be specified in the unit of 1 mm.
- A set screw will be provided by adding **-P** to the end of the part number.

Nominal size D	Bore diameter d _{H8}	
	min.	max.
80	10	15
100	10	17
125	12	20
140	14	22
150	14	22
160	14	24
200	16	25
250	20	30
300	20	35
315	20	35

- Set screw: Screw diameter and position of a set screw hole will be determined by bore diameter.

d		M	x*
min.	max.		
10	15	M5	7.5
16	22	M6	9
23	30	M8	12
31	35	M10	15

*Dimensions may vary depending on handwheel types.

Price • Delivery

- Please feel free to contact us.

Part number specification

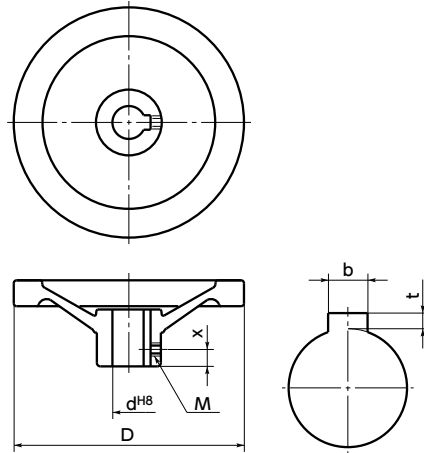
PH-140-AHC-15-P

Handwheel product part number	Processing type		
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Please specify handwheel product part number, processing type and bore diameter.

AKC Shaft hole (dimensional allowance H8) + new JIS key + 1 set screw hole

- Shaft hole (H8) / new JIS keyway, and 1 set screw hole will be processed.
- Shaft hole diameter can be specified from standard bore diameters.



AKC Target product

Hub Material	Product Code			
Cast iron	PH (→ P.397)	HSN (→ P.402)	D (→ P.403)	F (→ P.404)
Aluminum	HDA (→ P.398)	AV (→ P.400)	AH (→ P.401)	
Stainless Steel	PHS (→ P.397)	HSM (→ P.399)		

Dimensions

- Standard bore diameter d is set based on nominal handwheel sizes.
- A set screw will be provided by adding **-P** to the end of the part number.

Unit: mm

Nominal size D	Standard Bore Diameter d ^{H8}
80	10 · 11 · 12
100	10 · 11 · 12 · 14
125	12 · 14 · 15 · 16 · 17
140	14 · 15 · 16 · 17 · 18
150	14 · 15 · 16 · 17 · 18 · 19
160	14 · 15 · 16 · 17 · 18 · 19 · 20
200	16 · 17 · 18 · 19 · 20 · 21
250	20 · 21 · 22 · 24 · 25
300	20 · 21 · 22 · 24 · 25 · 28 · 30
315	20 · 21 · 22 · 24 · 25 · 28 · 30

- Keyway will be processed based on JIS B 1301.
- Screw diameter and position of a set screw hole will be determined by standard bore diameter.

Unit: mm

Standard Bore Diameter d ^{H8}	Keyway				Key Nominal Dimension b×h	Set screw	
	b		t			M	x*
	Basic Dimension	Allowance (JS9)	Basic Dimension	Allowance			
10 · 11 · 12	4	±0.015	1.8		4×4	M5	7.5
14 · 15	5	±0.015	2.3	+0.1	5×5	M5	7.5
16 · 17	5	±0.015	2.3	0	5×5	M6	9
18 · 19 · 20 · 21 · 22	6	±0.015	2.8		6×6	M6	9
24 · 25 · 28 · 30	8	±0.018	3.3	+0.2 0	8×7	M8	12

*Dimensions may vary depending on handwheel types.

Price • Delivery

- Please feel free to contact us.

Part number specification

D-200-AKC 20-P

Handwheel product part number Processing type

Please specify handwheel product part number, processing type and bore diameter.

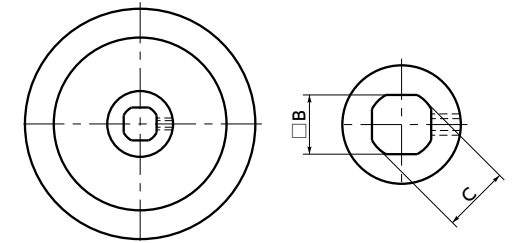
ASC Angle hole (dimensional allowance H11) + 1 set screw hole

- Angle hole (H11) and 1 set screw hole will be processed.
- Angle holes can be selected from standard angle diameters.
- With / without a set screw hole and/or set screw can be selected.

ASC — without set screw hole

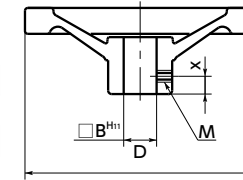
ASC-M — with a set screw hole

ASC-M-P — with a set screw hole and set screw



ASC Target product

Hub Material	Product Code			
Cast iron	PH (→ P.397)	HSN (→ P.402)	D (→ P.403)	F (→ P.404)
Aluminum	HDA (→ P.398)	AV (→ P.400)	AH (→ P.401)	
Stainless Steel	PHS (→ P.397)	HSM (→ P.399)		



Dimension

- Standard angle hole diameter B is set based on nominal handwheel sizes.

Unit: mm

Nominal size D	Standard angle hole diameter B ^{H11}
80	6 · 8 · 10 · 11 · 12
100	6 · 8 · 10 · 11 · 12
125	12 · 13 · 14
140	12 · 13 · 14
150	12 · 13 · 14
160	14 · 15 · 17
200	17 · 19
250	19 · 22
300	19 · 22
315	19 · 22

- Corners of an angle hole are arcuately chamfered.
- Diameter and position of a set screw hole will be determined by standard angle hole diameter.

Unit: mm

Standard angle hole diameter B ^{H11}	C	M	x*
6	8.25	M4	6
8	11.05	M4	6
10	13.70	M4	6
11	15.45	M5	7.5
12	15.85	M5	7.5
13	17.90	M5	7.5
14	19.20	M5	7.5
15	20.70	M5	7.5
17	23.10	M6	9
19	26.10	M6	9
22	29.60	M6	9

*Dimensions may vary depending on handwheel types.

Price • Delivery

- Please feel free to contact us.

Part number specification

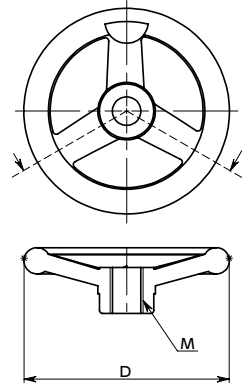
F-200-ASC 17 - M-P

Handwheel product part number Processing type

Please specify handwheel product part number, processing type, angle hole diameter, set screw hole, and with / without a set screw.

ATC Female screw (Through)

- Female screws (Through) will be processed.
- Screw diameters can be selected from standard screw diameters.



ATC Target product

Hub Material	Product Code			
Cast iron	PH (⇒ P.397)	HSN (⇒ P.402)	D (⇒ P.403)	F (⇒ P.404)
Aluminum	HDA (⇒ P.398)	AV (⇒ P.400)	AH (⇒ P.401)	
Stainless Steel	PHS (⇒ P.397)	HSM (⇒ P.399)		

Dimension

- Standard screw diameter is set based on nominal handwheel sizes.

Unit: mm

Nominal size D	Standard screw diameter M (coarse)					
80	M10	M12	M14			
100	M10	M12	M14	M16		
125	M10	M12	M14	M16		
140		M12	M14	M16	M20	
150		M12	M14	M16	M20	
160		M12	M14	M16	M20	
200				M16	M20	M24
250				M16	M20	M24
300				M16	M20	M24
315				M16	M20	M24

Price • Delivery

- Please feel free to contact us.

Part number specification

D-160-ATC M16

Handwheel product part number | Processing type

Please specify handwheel product part number, processing type and screw diameter.