

Section E
GUIDE POST SETS



Oilless Guide Post Set

Non lubrication type

Component

| No. | Description | Q'ty | Material | Remarks | Std. Symbol |
|-----|--------------|------|----------------------|-----------|-------------------------------------|
| 1 | Post bushing | 1 | FG-260 | | ASGRB ASGRB-N |
| 2 | Guide Post | 1 | Case Hardening Steel | HRC 56-60 | ANGP |
| 3 | Holder | 1 | FG -260 | | AGPH AGPH-T AGPH-N AGPH-NT |
| 4 | Set Screw | 1 | SCM 435 | | |

When ordering, specify;

Bushing & holder without dowel holes : ASGR-D X L

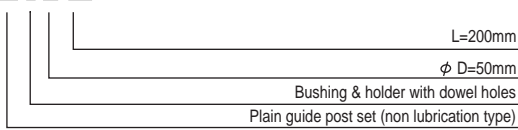
Bushing & holder with dowel holes : ASGR-N-D X L

Holder with tapped hole for height block : ASGR-T-D X L

With both dowel holes & tapped holes : ASGR-NT-D X L

Example

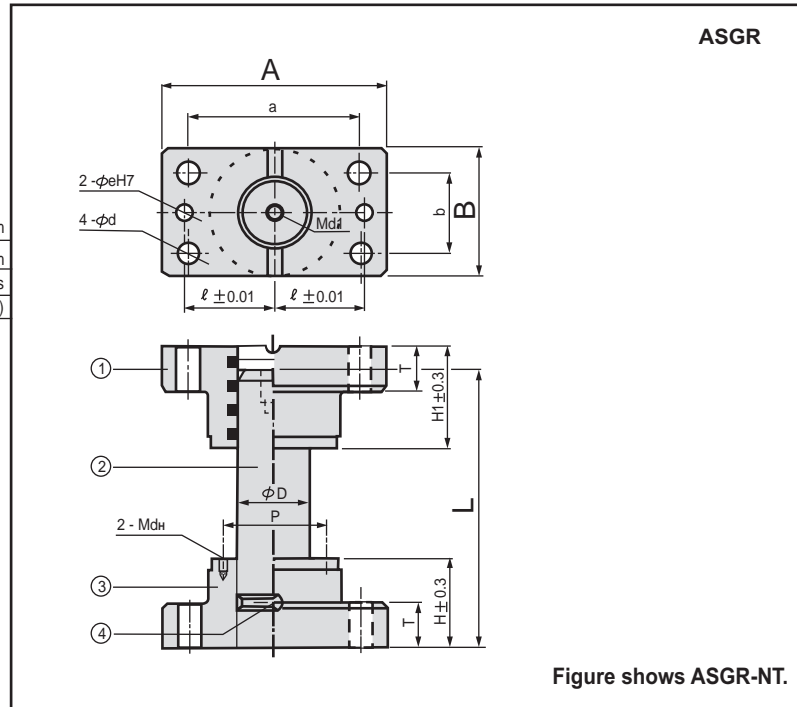
ASGR-N-50X200



ACCURACY :

Perpendicularity after assembly : 0.02 / 100 mm between bottom surface of bushing & center of guide pillar.

Parallelism after assembly : 0.02 / 100 mm between bottom surface of bushing & holder.



Dimension

| Standard No. | D | A | B | H | H ₁ | T | a | b | phi d | Md ₁ | Bolt | ASGR-N | | ASGR-T | | |
|--------------|----|-----|-----|-----|----------------|----|-----|-----|-------|-----------------|----------|--------|-----------|-----------|-----|-----------------|
| | | | | | | | | | | | | l | phi e | Dowel pin | p | Md _H |
| ASGR-25 x L | 25 | 84 | 48 | 30 | 45 | 20 | 66 | 30 | 9 | M8 x 35 | 33 | 8 | phi 8x30 | 37 | M4 | |
| ASGR-32 x L | 32 | 100 | 58 | 40 | 50 | | 76 | 36 | | | 45 | | | | | |
| ASGR-38 x L | 38 | 130 | 75 | 50 | 60 | 25 | 100 | 44 | 11 | M10 x 45 | 50 | 10 | phi 10x40 | 60 | M5 | |
| ASGR-50 x L | 50 | 155 | 90 | 65 | 85 | | 125 | 60 | | | 72 | | | M6 | | |
| ASGR-60 x L | 60 | 190 | 120 | 75 | 100 | 30 | 150 | 80 | 18 | M12 | M16 x 60 | 75 | 13 | phi 13x50 | 92 | M8 |
| ASGR-80 x L | 80 | 230 | 150 | 100 | 130 | 35 | 180 | 110 | 22 | | M20 x 75 | 95 | 16 | phi 16x60 | 116 | |

L size list

| Standard | Post dia. phi D | Post length L | | | | | | | | | | | | | | | | | |
|----------|-----------------|---------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 | 90 | 95 | | | |
| ASGR | 25 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 200 | | | | | | |
| ASGR-N | 32 | | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 200 | 220 | 250 | | | | |
| ASGR-T | 38 | | | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 200 | 220 | 250 | 280 | 300 | | |
| ASGR-NT | 50 | | | | | | | | | 160 | 170 | 180 | 200 | 220 | 250 | 280 | 300 | 350 | |
| | 60 | | | | | | | | | | | 180 | 200 | 220 | 250 | 280 | 300 | 350 | 400 |
| | 80 | | | | | | | | | | | | | 250 | 280 | 300 | 350 | 400 | 450 |

| ORDERING CODE | CATALOG NO. | D | L |
|---------------|-------------|----|-----|
| | ASGR-N | 60 | 200 |

Plain Guide Post Set

Component

| No. | Description | Q'ty | Material | Remarks | Std. Symbol |
|-----|--------------|------|----------------------|-----------|-------------------------------------|
| 1 | Post bushing | 1 | FG-260 | | ASGB ASGB-N |
| 2 | Guide Post | 1 | Case Hardening Steel | HRC 56-60 | ANGP |
| 3 | Holder | 1 | FG -260 | | AGPH AGPH-T AGPH-N AGPH-NT |
| 4 | Set Screw | 1 | SCM 435 | | |

When ordering, specify;

Bushing & holder without dowel holes : ASGO-D X L

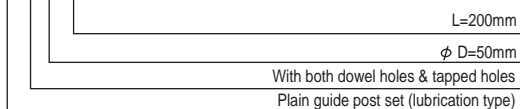
Bushing & holder with dowel holes : ASGO-N-D X L

Holder with tapped hole for height block : ASGO-T-D X L

With both dowel holes & tapped holes : ASGO-NT-D X L

Example

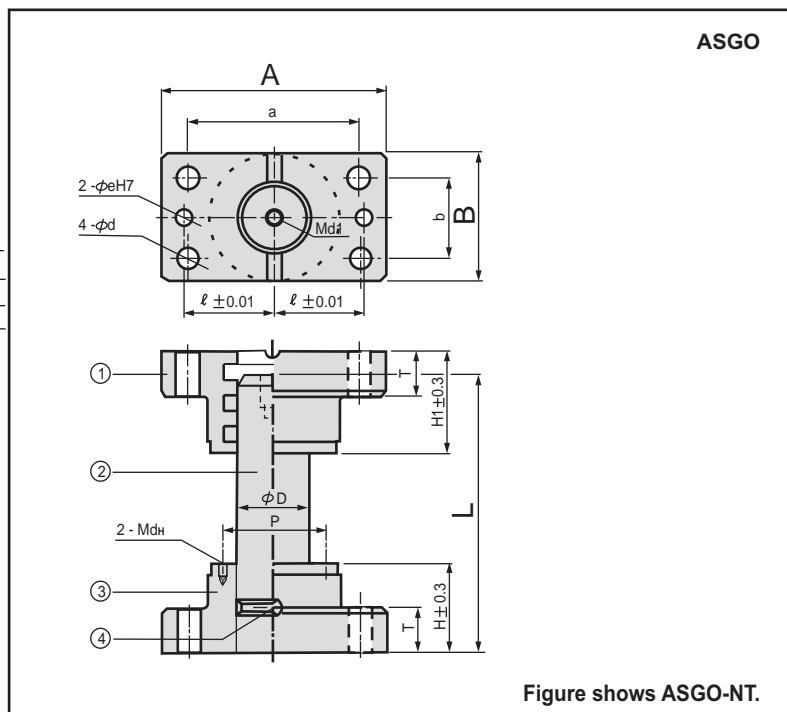
ASGO-NT-50X200



ACCURACY :

Perpendicularity after assembly : 0.02 / 100 mm between bottom surface of bushing & center of guide pillar.

Parallelism after assembly : 0.02 / 100 mm between bottom surface of bushing & holder.



Dimension

| Standard No. | φ D | A | B | H | H ₁ | T | a | b | φ d | Md ₁ | Bolt | ASGO-N | | ASGO-T | | |
|--------------|-----|-----|-----|-----|----------------|----|-----|-----|-----|-----------------|----------|--------|---------|-----------|---------|-----------------|
| | | | | | | | | | | | | ℓ | φ e | Dowel pin | p | Md _H |
| ASGO-25 x L | 25 | 84 | 48 | 30 | 45 | 20 | 66 | 30 | 9 | M8 x 35 | 33 | 8 | φ 8x30 | 37 | M4 | |
| ASGO-32 x L | 32 | 100 | 58 | 40 | 50 | | 76 | 36 | | | 45 | | | | | |
| ASGO-38 x L | 38 | 130 | 75 | 50 | 60 | 25 | 100 | 44 | 11 | M10 x 45 | 50 | 10 | φ 10x40 | 60 | M5 | |
| ASGO-50 x L | 50 | 155 | 90 | 65 | 85 | | 125 | 60 | | | 72 | | | M6 | | |
| ASGO-60 x L | 60 | 190 | 120 | 75 | 100 | 30 | 150 | 80 | 18 | M12 | M16 x 60 | 75 | 13 | φ 13x50 | 92 | M8 |
| ASGO-80 x L | 80 | 230 | 150 | 100 | 130 | 35 | 180 | 110 | 22 | | M20 x 75 | 95 | 16 | | φ 16x60 | |

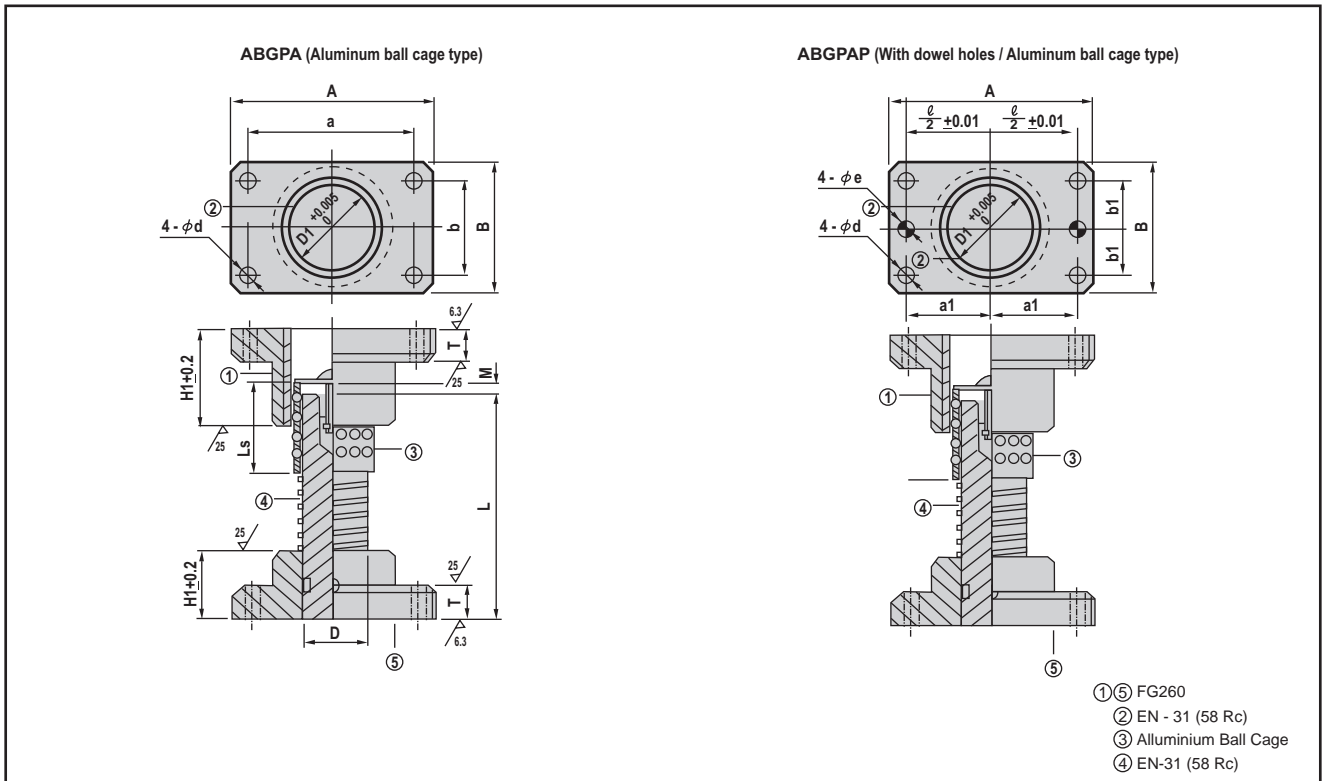
L size list

| Standard | Post dia. φ D | Post length L | | | | | | | | | | | | | | | | | | |
|----------|---------------|---------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| | | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 | 90 | 95 | 100 | 105 | 110 | |
| ASGO | 25 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 200 | | | | | | | |
| ASGO-N | 32 | | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 200 | 220 | 250 | | | | | |
| ASGO-T | 38 | | | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 200 | 220 | 250 | 280 | 300 | | | |
| ASGO-NT | 50 | | | | | | | | | 160 | 170 | 180 | 200 | 220 | 250 | 280 | 300 | 350 | | |
| | 60 | | | | | | | | | | | 180 | 200 | 220 | 250 | 280 | 300 | 350 | 400 | |
| | 80 | | | | | | | | | | | | | 250 | 280 | 300 | 350 | 400 | 450 | |

| ORDERING CODE | CATALOG NO. | D | L |
|---------------|-------------|----|-----|
| | ASGO-N | 60 | 200 |



Ball Bearing Guide Post Sets - Movable Stopper



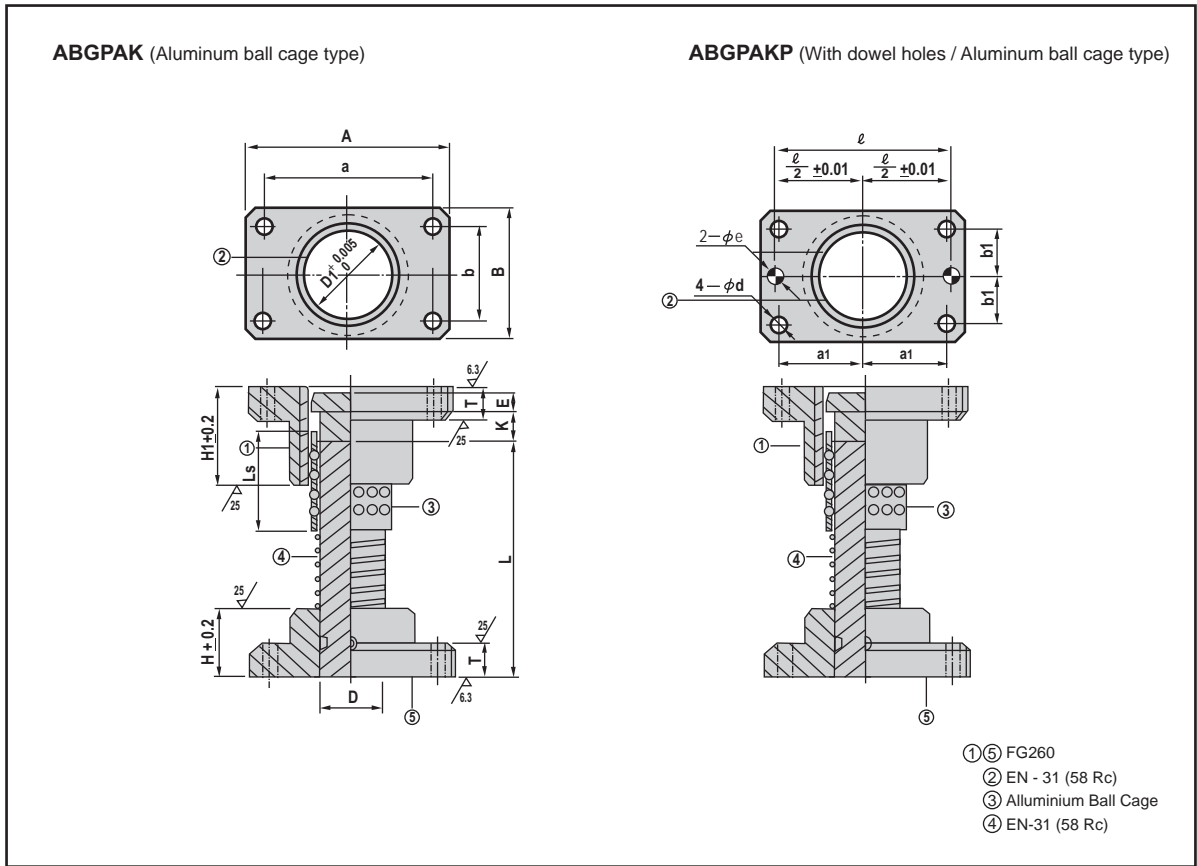
| D | D1 | A | B | a | b | d | H | H1 | T | Ls | M | ℓ | a1 | b1 | eH7 | ⑥ Attached bolts | ⑦ Attached dowel pin |
|----|----|-----|----|-----|----|-----|----|----|----|----|--------|-----|------|----|-------------|------------------|----------------------|
| 20 | 26 | 74 | 44 | 56 | 30 | 6.6 | 30 | 50 | 15 | 50 | 0 ~ 20 | 56 | 28 | 15 | +0.012 0 | M6 - 30 | AITHDP 6 - 20 |
| 25 | 31 | 84 | 48 | 66 | 30 | 9 | 30 | 45 | 20 | 45 | 0 ~ 20 | 66 | 33 | 15 | +0.015 0 | M8 - 35 | AITHDP 8 - 30 |
| 32 | 40 | 100 | 58 | 76 | 36 | 11 | 40 | 50 | 20 | 50 | 0 ~ 25 | 76 | 38 | 18 | | M10 - 40 | AITHDP 8 - 30 |
| 38 | 48 | 130 | 75 | 100 | 44 | 11 | 50 | 60 | 25 | 60 | 0 ~ 29 | 100 | 50 | 22 | | M10 - 45 | AITHDP 10 - 40 |
| 50 | 60 | 155 | 90 | 125 | 60 | 14 | 65 | 85 | 25 | 85 | 0 ~ 42 | 125 | 62.5 | 30 | | M12 - 50 | AITHDP 10 - 40 |

| Catalog No. | | L |
|-----------------|----|---------------------|
| Type | D | |
| ABGPA ABGPAP | 20 | 90 100 110 120 |
| | | 130 140 150 160 |
| | 25 | 90 100 110 120 |
| | | 130 140 150 160 |
| | | 170 180 200 |
| | 32 | 110 120 130 140 150 |
| | | 160 170 180 200 |
| | | 220 240 260 |
| | 38 | 130 140 150 160 |
| | | 170 180 200 220 |
| | | 240 260 300 |
| | 50 | 170 180 200 |
| 220 240 260 | | |
| 300 350 | | |

| | |
|------------------|---------------|
| ORDERING CODE | CATALOG NO. L |
| | ABGPAP 38 180 |



Ball Bearing Guide Post Sets - Fixed Stopper

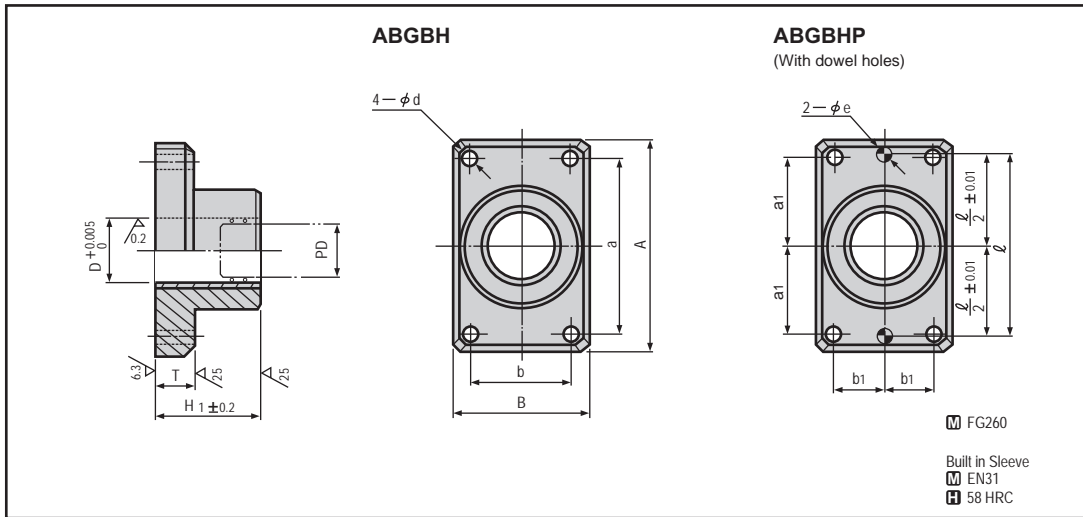


| D | D1 | A | B | a | b | d | H | H1 | T | K | E | Ls | ℓ | a1 | b1 | eH1 | ⑥ Attached bolts | ⑦ Attached dowel Pin |
|----|----|-----|-----|-----|----|----|----|-----|----|----|----|-----|-----|------|----|-----|------------------|----------------------|
| 25 | 31 | 84 | 48 | 66 | 30 | 9 | 30 | 45 | 20 | 20 | 5 | 45 | 66 | 33 | 15 | 8 | M8 - 35 | AITHDP 8 - 30 |
| 32 | 40 | 100 | 58 | 76 | 36 | 11 | 40 | 50 | 20 | 25 | 5 | 50 | 76 | 38 | 18 | 8 | M10 - 40 | AITHDP 8 - 30 |
| 38 | 48 | 130 | 75 | 100 | 44 | 11 | 50 | 60 | 25 | 30 | 10 | 60 | 100 | 50 | 22 | 10 | M10 - 45 | AITHDP 10 - 40 |
| 50 | 60 | 155 | 90 | 125 | 60 | 14 | 65 | 85 | 25 | 40 | 10 | 85 | 125 | 62.5 | 30 | 10 | M12 - 50 | AITHDP 10 - 40 |
| 60 | 70 | 190 | 120 | 150 | 80 | 18 | 75 | 100 | 30 | 50 | 15 | 100 | 150 | 75 | 45 | 13 | M16 - 60 | AITHDP 13 - 50 |

| Catalog No. | | L | | | | | | | | | | | | | | | | | | |
|-------------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|--|--|--|
| Type | D | | | | | | | | | | | | | | | | | | | |
| ABGPAK ABGPAKP | 25 | 90 | 100 | 110 | 120 | | | | | | | | | | | | | | | |
| | | | | | | 130 | 140 | 150 | 160 | | | | | | | | | | | |
| | | | | | | | | 170 | 180 | 200 | | | | | | | | | | |
| | 32 | 110 | 120 | 130 | 140 | 150 | | | | | | | | | | | | | | |
| | | | | | | 160 | 170 | 180 | 200 | | | | | | | | | | | |
| | | | | | | | | 220 | 240 | 260 | | | | | | | | | | |
| | 38 | | | | | 130 | 140 | 150 | 160 | | | | | | | | | | | |
| | | | | | | | | 170 | 180 | 200 | 220 | | | | | | | | | |
| | | | | | | | | | | 240 | 260 | 300 | | | | | | | | |
| | 50 | | | | | | | 170 | 180 | 200 | | | | | | | | | | |
| | | | | | | | | 220 | 240 | 260 | | | | | | | | | | |
| | | | | | | | | | | 300 | 350 | | | | | | | | | |
| 60 | | | | | | | | | 200 | 220 | | | | | | | | | | |
| | | | | | | | | | | | 240 | 260 | | | | | | | | |
| | | | | | | | | | | | | | 300 | 350 | | | | | | |

| | | |
|---------------|-------------|-----|
| ORDERING CODE | CATALOG NO. | L |
| | ABGPAK 50 | 200 |

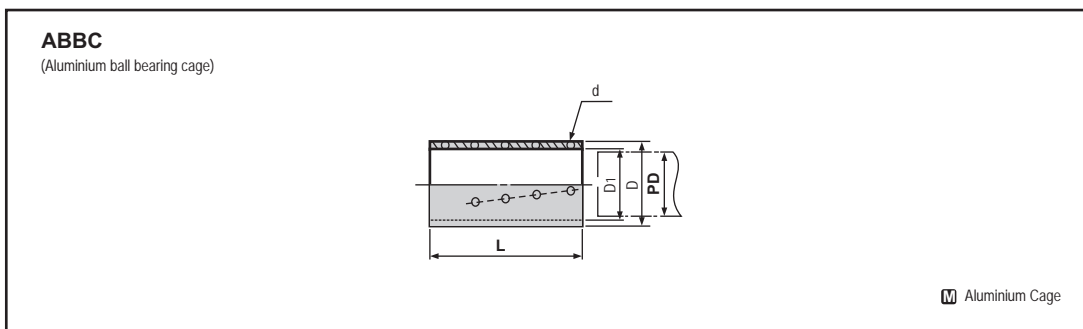
Ball Cage Guide Bushing



| Catalog No. | | D | A | B | a | b | d | H ₁ | T | eH7 | l | a ₁ | b ₁ | | | | |
|-----------------|----|----|-------------|-----|-----|-----|----|----------------|-----|-----|-------------|----------------|----------------|-------------|----|----|----|
| Type | PD | | | | | | | | | | | | | | | | |
| ABGBH ABGBHP | 20 | 26 | +0.005 0 | 74 | 44 | 56 | 30 | 6.6 | 50 | 15 | 6 | 8 | 10 | +0.012 0 | 56 | 28 | 15 |
| | 25 | 31 | | 84 | 48 | 66 | 30 | 9 | 45 | 20 | | | | | 66 | 33 | 15 |
| | 32 | 40 | | 100 | 58 | 76 | 36 | 11 | 50 | 20 | +0.015 0 | 76 | 38 | | 18 | | |
| | 38 | 48 | | 130 | 75 | 100 | 44 | 11 | 60 | 25 | 100 | 50 | 22 | | | | |
| | 50 | 60 | | 155 | 90 | 125 | 60 | 14 | 85 | 25 | 125 | 62.5 | 30 | | | | |
| | 60 | 70 | | 190 | 120 | 150 | 80 | 18 | 100 | 30 | +0.018 0 | 150 | 75 | | 40 | | |

| | |
|------------------|-------------------------|
| ORDERING CODE | CATALOG NO. ABGBH 32 |
|------------------|-------------------------|

Ball Bearing Cage

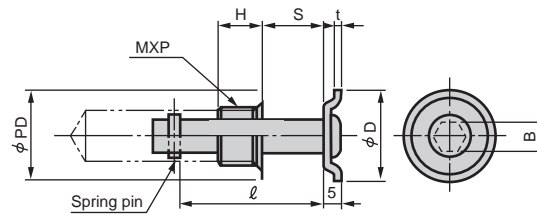


| Applicable Post dia. | OD φ D | ID φ D ₁ | Ball dia. φ d | Number of balls | Rate | Catalog No. | | |
|----------------------|--------|---------------------|---------------|-----------------|------|-------------|----|-----|
| | | | | | | Type | PD | L |
| 20 | 25.5 | 20.5 | 3 | 96 | 1.72 | ABBC | 20 | 50 |
| 25 | 30.5 | 25.5 | | 125 | 1.79 | | 25 | 45 |
| 32 | 39.5 | 32.5 | 4 | 144 | 1.65 | | 32 | 50 |
| 38 | 47.5 | 38.5 | | 128 | 1.64 | | 38 | 60 |
| 50 | 59.5 | 50.5 | 5 | 220 | 1.64 | | 50 | 85 |
| 60 | 69.5 | 60.5 | | 264 | 1.74 | | 60 | 100 |

| | | |
|------------------|------------------------|---------|
| ORDERING CODE | CATALOG NO. ABBC 20 | L 50 |
|------------------|------------------------|---------|

Stoppers

ASBGP
(Stopper)



| ABBC Ball cage length | ASBGP | |
|--------------------------|-------|----|
| | S | ℓ |
| 50 | 0~20 | 32 |
| 60 | 0~25 | 40 |
| 70 | 0~29 | 44 |
| 90 | 0~42 | 57 |

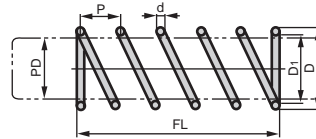
M Material : MS

| Catalog No. | | D | M×P | H | B | t |
|-------------|---------|----|--------|----|----|-----|
| Type | PD - L | | | | | |
| ASBGP | 20 - 50 | 24 | 14×1.5 | 12 | 7 | 1.6 |
| | 25 - 50 | 29 | 16×1.5 | | 8 | |
| | 32 - 60 | 37 | 20×1.5 | 15 | 10 | |
| | 38 - 70 | 44 | | | | |
| | 50 - 90 | 56 | | | | |

ORDERING CODE **CATALOG NO.**
ASBGP 38-70

Spring for Ball Bearing Guide Post Sets

ASBGP
(Spring)



| PD Post.dia. | D | D1 | d | P | |
|--------------|------|------|------|-----|----|
| 20 | 22.5 | 20.5 | +1.0 | 1.0 | 14 |
| 25 | 27.9 | 25.5 | 0 | 1.2 | 14 |
| 32 | 35.7 | 32.5 | +1.5 | 1.6 | 16 |
| 38 | 42.5 | 38.5 | 0 | 2.0 | 18 |
| 50 | 55.7 | 50.5 | +2.0 | 2.6 | 20 |
| 60 | 66.9 | 60.5 | 0 | 3.2 | 20 |

M Material : Spring Steel

| Guide post sets | | Catalog No. | | FL |
|-----------------|-----|-------------|----|-----|
| D | L | Type | PD | |
| 20 | 90 | ASBGP | 20 | 40 |
| | 100 | | | 50 |
| | 110 | | | 70 |
| | 120 | | | 80 |
| | 130 | | | 100 |
| | 140 | | | 140 |
| | 150 | | | 120 |
| | 160 | | | 140 |
| | 180 | | | 40 |
| | 90 | | | 50 |
| 25 | 100 | ASBGP | 25 | 40 |
| | 110 | | | 70 |
| | 120 | | | 80 |
| | 130 | | | 100 |
| | 140 | | | 140 |
| | 150 | | | 120 |
| | 160 | | | 140 |
| | 170 | | | 150 |
| | 180 | | | 160 |
| | 200 | | | 180 |

| Guide post sets | | Catalog No. | | FL |
|-----------------|-----|-------------|----|-----|
| D | L | Type | PD | |
| 32 | 110 | ASBGP | 32 | 50 |
| | 120 | | | 60 |
| | 130 | | | 70 |
| | 140 | | | 80 |
| | 150 | | | 110 |
| | 160 | | | 120 |
| | 170 | | | 130 |
| | 180 | | | 140 |
| | 200 | | | 170 |
| | 220 | | | 190 |
| 38 | 240 | ASBGP | 38 | 60 |
| | 260 | | | 70 |
| | 280 | | | 80 |
| | 300 | | | 90 |
| | 130 | | | 110 |
| | 140 | | | 120 |
| | 150 | | | 130 |
| | 160 | | | 140 |
| | 170 | | | 150 |
| | 180 | | | 160 |
| 200 | 170 | | | |
| 220 | 180 | | | |
| 240 | 190 | | | |
| 260 | 210 | | | |
| 300 | 230 | | | |

| Guide post sets | | Catalog No. | | FL |
|-----------------|-----|-------------|----|-----|
| D | L | Type | PD | |
| 50 | 170 | ASBGP | 50 | 70 |
| | 180 | | | 90 |
| | 200 | | | 110 |
| | 220 | | | 140 |
| | 240 | | | 170 |
| | 260 | | | 190 |
| | 300 | | | 230 |
| | 350 | | | 280 |
| | 200 | | | 90 |
| | 220 | | | 130 |
| 60 | 240 | ASBGP | 60 | 150 |
| | 260 | | | 180 |
| | 300 | | | 230 |
| | 350 | | | 250 |
| | 350 | | | 250 |

ORDERING CODE **CATALOG NO.**
ASBGP 38-150

Guide Post Holder

When ordering, specify;

Without dowel holes : AGPH-D

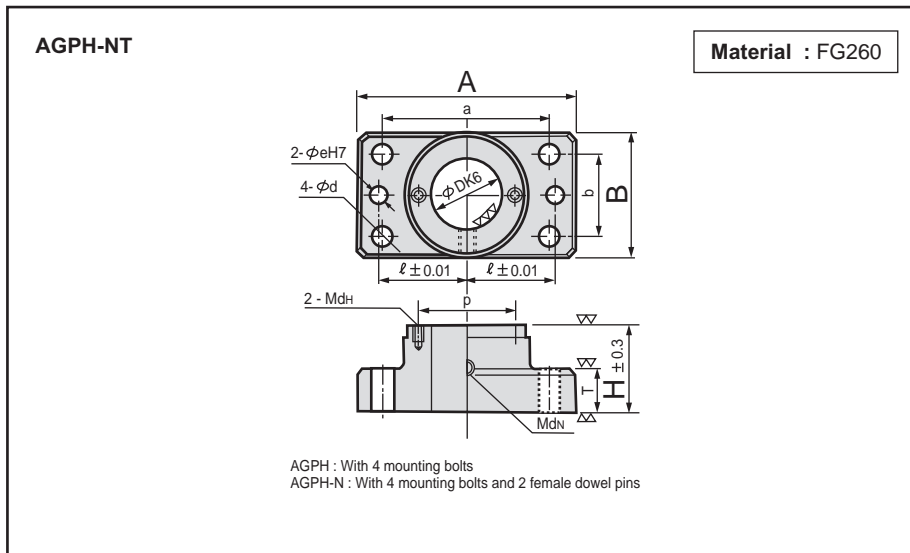
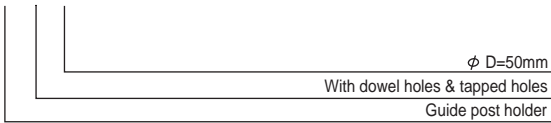
With dowel holes : AGPH-N-D

With tapped holes : AGPH-T-D

With dowel holes & tapped holes : AGPH-NT-D

Example

AGPH-NT-50



| Standard No. | $\phi DK6$ | A | B | H | T | a | b | ϕd | Md_H | Bolt | ℓ | AGPH-N | | AGPH-T | |
|--------------|------------|----------------------|-----|-----|-----|-----|-----|----------|--------|----------|--------|----------|--------------|--------|--------|
| | | | | | | | | | | | | ϕe | Dowel pin | p | Md_H |
| AGPH-25 | 25 | $^{+0.002}_{-0.011}$ | 84 | 48 | 30 | 66 | 30 | 9 | M8 | M 8 x 35 | 33 | 8 | ϕ 8x30 | 37 | M4 |
| AGPH-32 | 32 | $^{+0.003}_{-0.013}$ | 100 | 58 | 40 | 76 | 36 | 11 | | M10 x 40 | 38 | | | 45 | |
| AGPH-38 | 38 | $^{+0.003}_{-0.013}$ | 130 | 75 | 50 | 100 | 44 | 14 | M12 | M10 x 45 | 50 | 10 | ϕ 10x40 | 60 | M5 |
| AGPH-50 | 50 | $^{+0.004}_{-0.015}$ | 155 | 90 | 65 | 125 | 60 | | | M12 x 50 | 62.5 | | | 72 | |
| AGPH-60 | 60 | $^{+0.004}_{-0.015}$ | 190 | 120 | 75 | 150 | 80 | 18 | M12 | M16 x 60 | 75 | 13 | ϕ 13x50 | 92 | M8 |
| AGPH-80 | 80 | $^{+0.004}_{-0.015}$ | 230 | 150 | 100 | 180 | 110 | 22 | | M20 x 75 | 95 | | | 16 | |

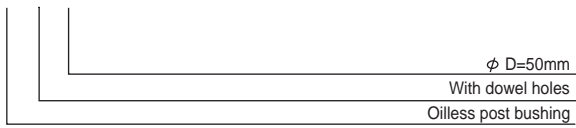
Plain Post Bushing, Oilless Post Bushing

When ordering, specify;

Without dowel holes : ASGB-D
 ASGRB-D
 With dowel holes : ASGB-N-D
 ASGRB-N-D

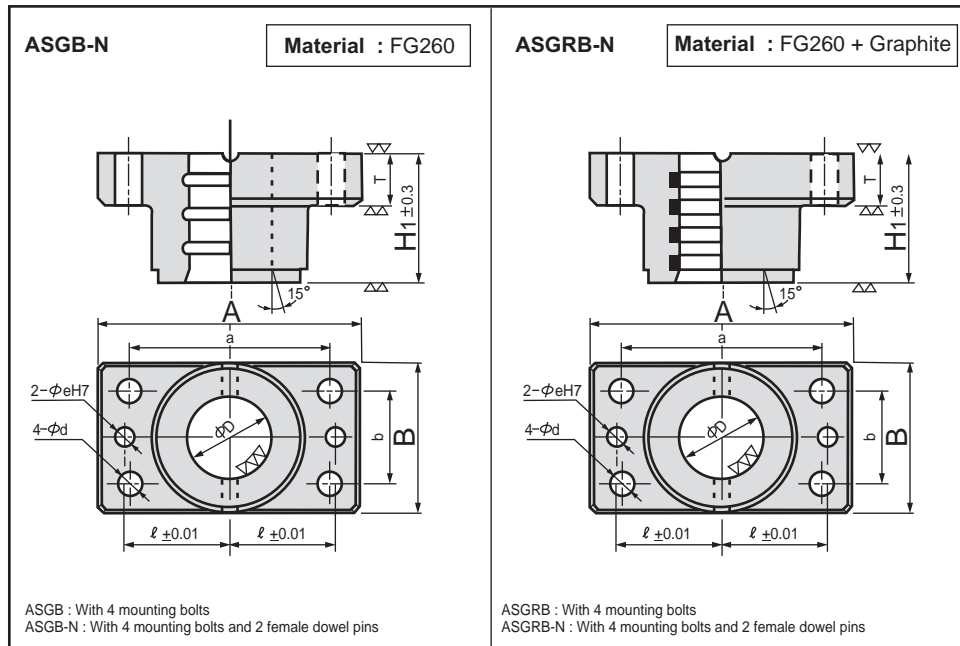
Example

ASGRB-N-50



Plain post bushing (Requires lubrication)

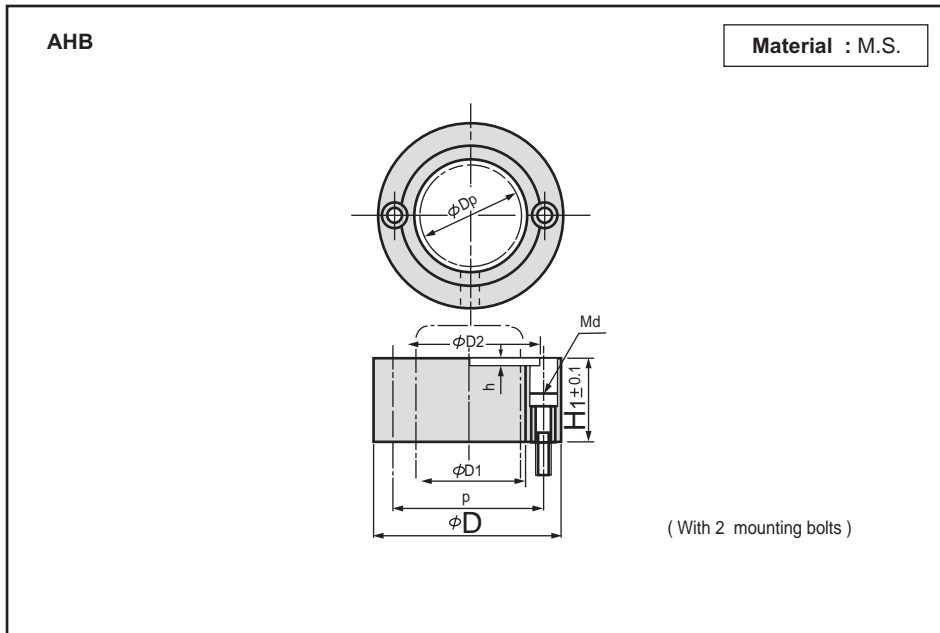
Oilless post bushing



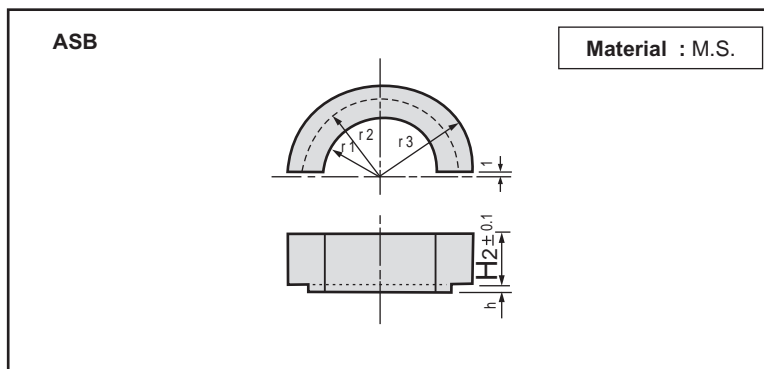
ASGB-N ASGRB-N

| Standard No. | φD Tolerance | A | B | H ₁ | T | a | b | φd | Bolt | ℓ | φe | Dowel pin |
|----------------|------------------------|-----|-----|----------------|----|-----|-----|----|----------|------|----|-----------|
| ASGB(ASGRB)-25 | 25 +0.041 +0.031 | 84 | 48 | 45 | 20 | 66 | 30 | 9 | M 8 x 35 | 33 | 8 | φ 8x30 |
| ASGB(ASGRB)-32 | 32 +0.047 +0.037 | 100 | 58 | 50 | | 76 | 36 | 11 | M10 x 40 | 38 | | |
| ASGB(ASGRB)-38 | 38 +0.049 +0.037 | 130 | 75 | 60 | 25 | 100 | 44 | 14 | M10 x 45 | 50 | 10 | φ 10x40 |
| ASGB(ASGRB)-50 | 50 +0.052 +0.037 | 155 | 90 | 85 | | 125 | 60 | | M12 x 50 | 62.5 | | |
| ASGB(ASGRB)-60 | 60 +0.061 +0.043 | 190 | 120 | 100 | 30 | 150 | 80 | 18 | M16 x 60 | 75 | 13 | φ 13x50 |
| ASGB(ASGRB)-80 | 80 +0.063 +0.043 | 230 | 150 | 130 | 35 | 180 | 110 | 22 | M20 x 75 | 95 | 16 | φ 16x60 |

Height Block

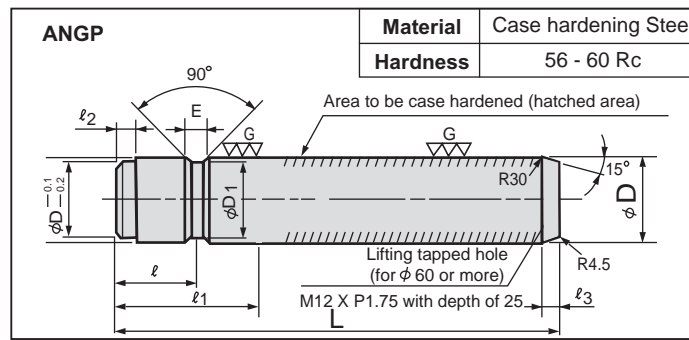


| Standard No. | ϕD_p | ϕD | ϕD_1 | ϕD_2 | h | p | Md | H_1 In 5mm each | Safety color | |
|----------------|------------|----------|------------|------------|-----|----|----|----------------------|------------------------|----|
| AHB-25 x H_1 | 25 | 46 | 31.5 | 36 | 2 | 37 | M4 | 10 ~ 50 | Red or Yellow R / Y | |
| AHB-32 x H_1 | 32 | 56 | 41 | 45 | | | | | | |
| AHB-38 x H_1 | 38 | 72 | 49 | 56 | 3 | 60 | M5 | 15 ~ 50 | | |
| AHB-50 x H_1 | 50 | 86 | 62 | 68 | | 72 | | | | M6 |
| AHB-60 x H_1 | 60 | 112 | 76 | 84 | | 92 | | | | |
| AHB-80 x H_1 | 80 | 140 | 100 | 108 | 116 | | | | | |



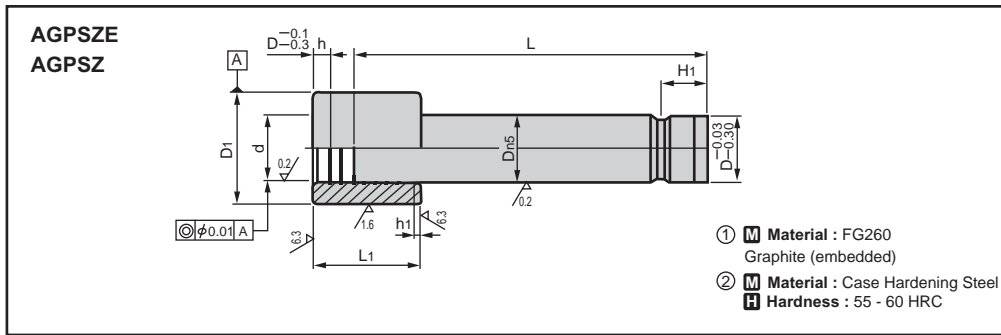
| Standard No. | ϕD_p | r_1 | r_2 | r_3 | h | H_2 In 5mm each | Safety color |
|----------------|------------|-------|-------|-------|---|----------------------|------------------------|
| ASB-25 x H_2 | 25 | 16 | 18 | 23 | 2 | 10 ~ 40 | Red or Yellow R / Y |
| ASB-32 x H_2 | 32 | 20.5 | 22.5 | 28 | | | |
| ASB-38 x H_2 | 38 | 25 | 28 | 36 | 3 | 10 ~ 50 | |
| ASB-50 x H_2 | 50 | 31 | 34 | 43 | | | |
| ASB-60 x H_2 | 60 | 38 | 42 | 56 | | | |
| ASB-80 x H_2 | 80 | 50 | 54 | 70 | | | |

Guide Post (For Plain & Oilless Bushing)



| Standard No. | ϕD | Tolerance | L | ϕD_1 | l | l_1 | l_2 | l_3 | E | | | | | | | | |
|---------------|----------|------------------|-----|------------------|-----|-------|-------|-------|---|------------------|-----|----|------|-----|---|----|----|
| ANGP-25 X 80 | 25 | +0.024 +0.015 | 80 | 22 | 15 | 35 | 4 | 5 | 8 | | | | | | | | |
| ANGP-25 X 90 | | | 90 | | | | | | | | | | | | | | |
| ANGP-25 X 100 | | | 100 | | | | | | | | | | | | | | |
| ANGP-25 X 110 | | | 110 | | | | | | | | | | | | | | |
| ANGP-25 X 120 | | | 120 | | | | | | | | | | | | | | |
| ANGP-25 X 130 | | | 130 | | | | | | | | | | | | | | |
| ANGP-25 X 140 | | | 140 | | | | | | | | | | | | | | |
| ANGP-25 X 150 | | | 150 | | | | | | | | | | | | | | |
| ANGP-25 X 160 | | | 160 | | | | | | | | | | | | | | |
| ANGP-25 X 170 | | | 170 | | | | | | | | | | | | | | |
| ANGP-25 X 180 | | | 180 | | | | | | | | | | | | | | |
| ANGP-25 X 200 | | | 200 | | | | | | | | | | | | | | |
| ANGP-32 X 100 | | | 32 | | | | | | | +0.028 +0.017 | 100 | 29 | 20 | 45 | 4 | 5 | 8 |
| ANGP-32 X 110 | | | | | | | | | | | 110 | | | | | | |
| ANGP-32 X 120 | 120 | | | | | | | | | | | | | | | | |
| ANGP-32 X 130 | 130 | | | | | | | | | | | | | | | | |
| ANGP-32 X 140 | 140 | | | | | | | | | | | | | | | | |
| ANGP-32 X 150 | 150 | | | | | | | | | | | | | | | | |
| ANGP-32 X 160 | 160 | | | | | | | | | | | | | | | | |
| ANGP-32 X 170 | 170 | | | | | | | | | | | | | | | | |
| ANGP-32 X 180 | 180 | | | | | | | | | | | | | | | | |
| ANGP-32 X 200 | 200 | | | | | | | | | | | | | | | | |
| ANGP-32 X 220 | 220 | | | | | | | | | | | | | | | | |
| ANGP-32 X 250 | 250 | | | | | | | | | | | | | | | | |
| ANGP-38 X 120 | 38 | +0.028 +0.017 | | 120 | 35 | 25 | 55 | 5 | 5 | | 8 | | | | | | |
| ANGP-38 X 130 | | | | 130 | | | | | | | | | | | | | |
| ANGP-38 X 140 | | | 140 | | | | | | | | | | | | | | |
| ANGP-38 X 150 | | | 150 | | | | | | | | | | | | | | |
| ANGP-38 X 160 | | | 160 | | | | | | | | | | | | | | |
| ANGP-38 X 170 | | | 170 | | | | | | | | | | | | | | |
| ANGP-38 X 180 | | | 180 | | | | | | | | | | | | | | |
| ANGP-38 X 200 | | | 200 | | | | | | | | | | | | | | |
| ANGP-38 X 220 | | | 220 | | | | | | | | | | | | | | |
| ANGP-38 X 250 | | | 250 | | | | | | | | | | | | | | |
| ANGP-38 X 280 | | | 280 | | | | | | | | | | | | | | |
| ANGP-38 X 300 | | | 300 | | | | | | | | | | | | | | |
| ANGP-50 X 160 | | | 50 | +0.028 +0.017 | | | | | | 160 | | 46 | 32.5 | 70 | 5 | 10 | 12 |
| ANGP-50 X 170 | | | | | | | | | | 170 | | | | | | | |
| ANGP-50 X 180 | 180 | | | | | | | | | | | | | | | | |
| ANGP-50 X 200 | 200 | | | | | | | | | | | | | | | | |
| ANGP-50 X 220 | 220 | | | | | | | | | | | | | | | | |
| ANGP-50 X 250 | 250 | | | | | | | | | | | | | | | | |
| ANGP-50 X 280 | 280 | | | | | | | | | | | | | | | | |
| ANGP-50 X 300 | 300 | | | | | | | | | | | | | | | | |
| ANGP-50 X 350 | 350 | | | | | | | | | | | | | | | | |
| ANGP-60 X 180 | 60 | +0.033 +0.020 | | | 180 | 56 | 37.5 | 80 | 6 | 10 | 12 | | | | | | |
| ANGP-60 X 200 | | | 200 | | | | | | | | | | | | | | |
| ANGP-60 X 220 | | | 220 | | | | | | | | | | | | | | |
| ANGP-60 X 250 | | | 250 | | | | | | | | | | | | | | |
| ANGP-60 X 280 | | | 280 | | | | | | | | | | | | | | |
| ANGP-60 X 300 | | | 300 | | | | | | | | | | | | | | |
| ANGP-60 X 350 | | | 350 | | | | | | | | | | | | | | |
| ANGP-60 X 400 | | | 400 | | | | | | | | | | | | | | |
| ANGP-80 X 250 | | | 80 | +0.033 +0.020 | 250 | | | | | | | 76 | 50 | 105 | 8 | 10 | 12 |
| ANGP-80 X 280 | | | | | 280 | | | | | | | | | | | | |
| ANGP-80 X 300 | 300 | | | | | | | | | | | | | | | | |
| ANGP-80 X 350 | 350 | | | | | | | | | | | | | | | | |
| ANGP-80 X 400 | 400 | | | | | | | | | | | | | | | | |
| ANGP-80 X 450 | 450 | | | | | | | | | | | | | | | | |

Oil-free Guide Post Sets - Press Fit Type

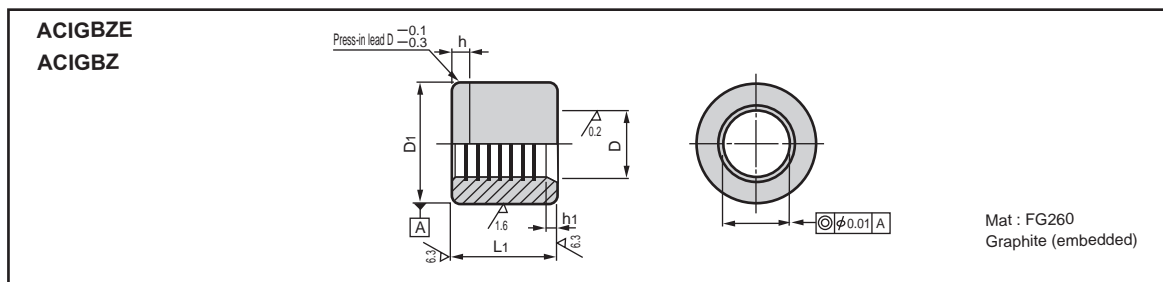


| ② | | ① | | | | | | | | |
|-----|------------------|------|----|------------------|-----|----------|-----|----------|----|----|
| Dn5 | H1 | d | | D1JS5 | | | | h | h1 | L1 |
| | | | | AGPSZE | | AGPSZ | | | | |
| 32 | +0.028 +0.017 | 20 | 32 | +0.047 +0.037 | 52 | — | — | 8 | 4 | 48 |
| 38 | | 25 | 28 | +0.049 +0.037 | 60 | — | — | 10 | 5 | 55 |
| 50 | | 32.5 | 50 | +0.052 +0.037 | 70 | ± 0.0065 | 75 | ± 0.0065 | 15 | 10 |
| 60 | +0.033 +0.020 | 37.5 | 60 | +0.061 +0.043 | 80 | — | — | 20 | 10 | 90 |
| 80 | | 50 | 80 | +0.063 +0.043 | 100 | ± 0.0075 | 110 | ± 0.0075 | 25 | 10 |

| D1 | Catalog No. | | L | | | | | | | | | | | | | | | | | | |
|-----|-------------|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| | Type | D | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 200 | 220 | 250 | 280 | 300 | 350 | 400 | 450 | |
| 52 | AGPSZE | 32 | | | | | | | | | | | | | | | | | | | |
| 60 | | 38 | | | | | | | | | | | | | | | | | | | |
| 70 | | 50 | | | | | | | | | | | | | | | | | | | |
| 80 | | 60 | | | | | | | | | | | | | | | | | | | |
| 100 | | 80 | | | | | | | | | | | | | | | | | | | |
| 75 | AGPSZ | 50 | | | | | | | | | | | | | | | | | | | |
| 85 | | 60 | | | | | | | | | | | | | | | | | | | |
| 110 | | 80 | | | | | | | | | | | | | | | | | | | |

| ORDERING CODE | CATALOG NO. | L |
|---------------|-------------|-----|
| | AGPSZE 60 | 200 |

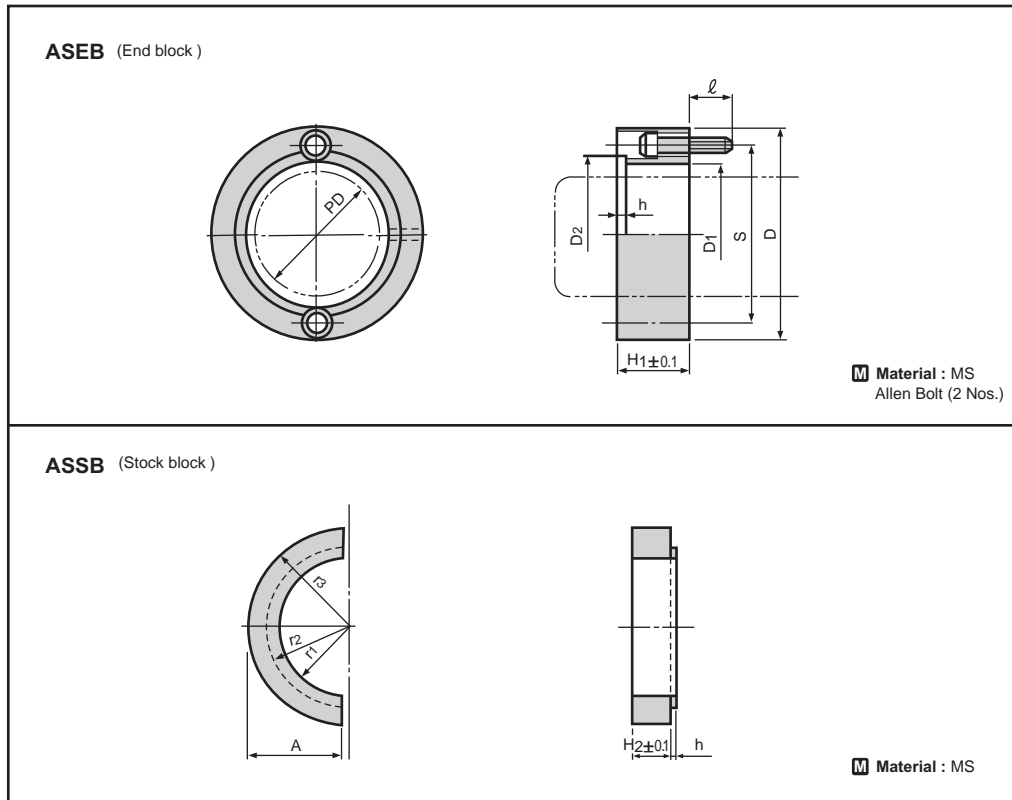
Oil-free Guide Bushings - Press Fit Type



| Catalog No. | | D1JS5 | | | | h | h1 | L1 |
|-------------|----|------------------|--------|----------|-----|----------|----|-----|
| Type | D | ACIGBZE | ACIGBZ | | | | | |
| ACIGBZE | 32 | +0.047 +0.037 | 52 | — | — | 8 | 4 | 48 |
| | 38 | +0.049 +0.037 | 60 | — | — | 10 | 5 | 55 |
| ACIGBZ | 50 | +0.052 +0.037 | 70 | ± 0.0065 | 75 | ± 0.0065 | 15 | 75 |
| | 60 | +0.061 +0.043 | 80 | — | — | 20 | 10 | 90 |
| | 80 | +0.063 +0.043 | 100 | ± 0.0075 | 110 | ± 0.0075 | 25 | 120 |

| ORDERING CODE | CATALOG NO. |
|---------------|-------------|
| | ACIGBZ 50 |

Stroke End Blocks



| PD | D | D1 | D2 | S | h | r1 | r2 | r3 | A | Allen bolt size ③ | ℓ |
|----|-----|------|-----|-----|---|-------|------|----|----|----------------------|----|
| 25 | 46 | 31.5 | 36 | 37 | 2 | 15.75 | 18 | 23 | 22 | M4 X P0.7 | 10 |
| 32 | 56 | 41 | 45 | 45 | 2 | 20.5 | 22.5 | 28 | 27 | M4 X P0.7 | 10 |
| 38 | 72 | 49 | 56 | 60 | 3 | 24.5 | 28 | 36 | 35 | M5 X P0.8 | 10 |
| 50 | 86 | 62 | 68 | 72 | 3 | 31 | 34 | 43 | 42 | M6 X P1.0 | 10 |
| 60 | 112 | 76 | 84 | 92 | 3 | 38 | 42 | 56 | 55 | M8 X P1.25 | 12 |
| 80 | 140 | 100 | 108 | 116 | 3 | 50 | 54 | 70 | 69 | M8 X P1.25 | 12 |

■ End block

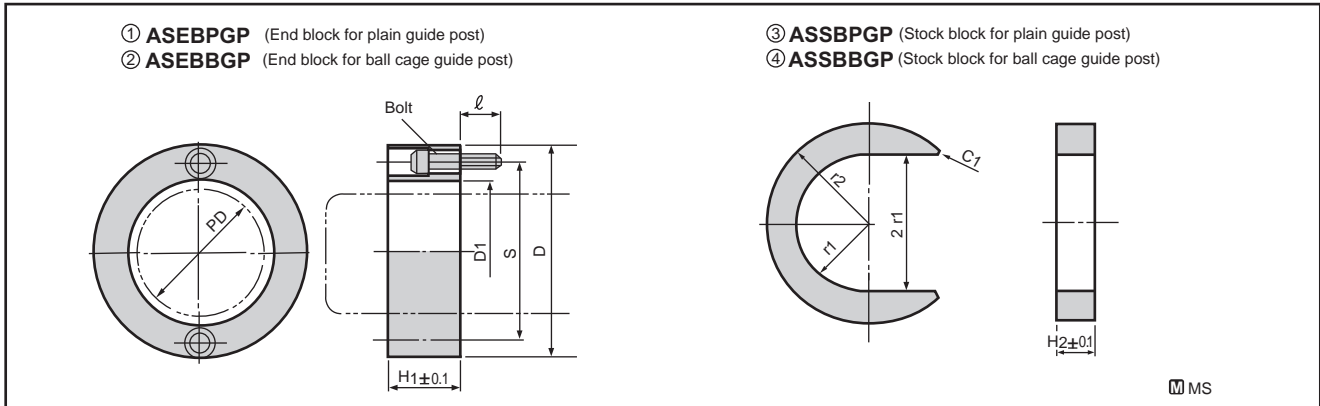
| Catalog No. | | H1 | Color |
|-------------|-------|----------------|---------------|
| Type | PD | 5mm increments | |
| ASEB | 25 | 10~50 | R (Red) |
| | 32 | 10~50 | |
| | | 55~60 | |
| | 38 | 15~30 | Y (Yellow) |
| | | 55~70 | |
| | 50 | 20~50 | |
| 55~80 | | | |
| 60 | 20~50 | | |
| | 55~80 | | |
| 80 | 20~50 | | |
| | 55~80 | | |

■ Stock block

| Catalog No. | | H2 | Color |
|-------------|-------|----------------|---------------|
| Type | PD | 5mm increments | |
| ASSB | 25 | 10~20 | R (Red) |
| | | 25~40 | |
| | 32 | 10~20 | |
| | | 25~40 | |
| | 38 | 10~20 | Y (Yellow) |
| | | 25~50 | |
| 50 | 10~20 | | |
| | 25~50 | | |
| 60 | 10~20 | | |
| | 25~50 | | |
| 80 | 10~20 | | |
| | 25~50 | | |

| ORDERING CODE | CATALOG NO. | H1 | R - Y |
|---------------|-------------|----|-------|
| | ASEB 38 | 30 | Y |

Stroke End Block (Flat Type)



MS

| PD | D | ①ASEBPGP D ₁ | ②ASEBBGP D ₁ | ③ASSBPGP r ₁ | ④ASSBBGP r ₁ | S | r ₂ | Bolt | ℓ |
|----|-----|----------------------------|----------------------------|----------------------------|----------------------------|-----|----------------|------------|----|
| 25 | 45 | 29 | 31.5 | 14.5 | 15.75 | 37 | 23 | M4 X P0.7 | 10 |
| 32 | 56 | 37 | 41 | 18.5 | 20.5 | 45 | 28 | M4 X P0.7 | 10 |
| 38 | 72 | 43 | 49 | 21.5 | 24.5 | 60 | 36 | M5 X P0.8 | 10 |
| 50 | 86 | 56 | 62 | 28 | 31 | 72 | 43 | M6 X P1.0 | 10 |
| 60 | 112 | 66 | 76 | 33 | 38 | 92 | 56 | M8 X P1.25 | 12 |
| 80 | 140 | 88 | 100 | 44 | 50 | 116 | 70 | M8 X P1.25 | 12 |

End block

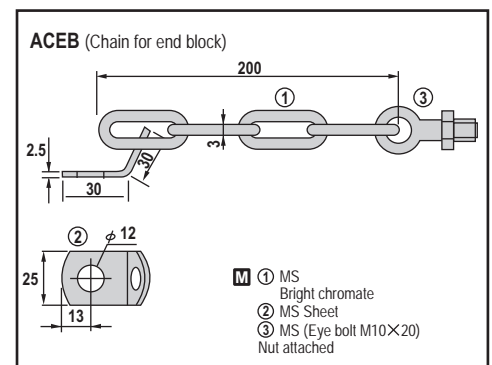
| Catalog No. | | H ₁ | Color | |
|-------------|-------|----------------|------------|---------------|
| Type | PD | 5mm increments | | |
| ①ASEBPGP | 25 | 10~30 | R (Red) | |
| | | 35~50 | | |
| | 32 | 10~30 | | |
| 35~50 | | | | |
| ②ASEBBGP | 38 | 15~30 | | Y (Yellow) |
| | | 35~50 | | |
| 50 | 20~30 | | | |
| | 35~50 | | | |
| 60 | 20~30 | | | |
| | 35~50 | | | |
| 80 | 20~30 | | | |
| | 35~50 | | | |

Stock block

| Catalog No. | | H ₁ | Color | |
|-------------|-------|----------------|------------|---------------|
| Type | PD | 5mm increments | | |
| ③ASSBPGP | 25 | 10~20 | R (Red) | |
| | | 25~40 | | |
| | 32 | 10~20 | | |
| 25~40 | | | | |
| ④ASSBBGP | 38 | 10~20 | | Y (Yellow) |
| | | 25~50 | | |
| 50 | 10~20 | | | |
| | 25~50 | | | |
| 60 | 10~20 | | | |
| | 25~50 | | | |
| 80 | 10~20 | | | |
| | 25~50 | | | |

| ORDERING CODE | CATALOG NO. | H ₁ | Color (R - Y) |
|---------------|-------------|----------------|---------------|
| | ASEBPGP 32 | 30 | Y |

| Catalog No. | | ①/② (End block) | | ③/④ (Stock block) | | |
|---------------------------------|---------|-------------------------------|---------------|-------------------------------|---------------|---------------|
| Type | PD | H ₁ 5mm increments | Color | H ₂ 5mm increments | Color | |
| AEBSBPGP (①ASEBPGP+③ASSBPGP) | 25 | 10 ~ 30 | R (Red) | 10 ~ 20 | R (Red) | |
| | | 35 ~ 50 | | 25 ~ 40 | | |
| | | 10 ~ 20 | | 25 ~ 40 | | |
| | 32 | 35 ~ 50 | | 10 ~ 20 | | Y (Yellow) |
| | | 35 ~ 50 | | 25 ~ 40 | | |
| | | 10 ~ 20 | | 25 ~ 40 | | |
| 38 | 15 ~ 30 | 10 ~ 20 | Y (Yellow) | | | |
| | | 25 ~ 50 | | | | |
| | 35 ~ 50 | 10 ~ 20 | | Y (Yellow) | | |
| 25 ~ 50 | | | | | | |
| AEBSBBGP (②ASEBBGP+④ASSBBGP) | 50 | 20 ~ 30 | | | Y (Yellow) | |
| | | 35 ~ 50 | | | | |
| | 60 | 20 ~ 30 | Y (Yellow) | | | |
| 35 ~ 50 | | | | | | |
| 80 | 20 ~ 30 | 10 ~ 20 | | Y (Yellow) | | |
| | | 25 ~ 50 | | | | |
| | 35 ~ 50 | 10 ~ 20 | | | Y (Yellow) | |
| 25 ~ 50 | | | | | | |



| ORDERING CODE | CATALOG NO. |
|---------------|-------------|
| | ACEB |

Note : The guide post set requires tap hole machining for mounting.

| ORDERING CODE | CATLOG NO. | | ①·② | | ③·④ | |
|---------------|------------|----|----------------|-------|----------------|-------|
| | TYPE | PD | H ₁ | R - Y | H ₂ | R - Y |
| | AEBSBPGP | 50 | 40 | Y | 30 | R |

Locking Blocks For Guide Bushing

ALBGB

| Dimension T | Supplied bolt length L |
|-------------|------------------------|
| 20 | 25 |
| 25 | 30 |
| 30 | 35 |
| 35 | 40 |
| 40 | 45 |
| 45 | 50 |
| 50 | 55 |
| 55 | 60 |

M MS (Blakodised)
A Socket head cap screw

| D1 | PD Applicable diameter of posts | D2 Applicable bushing outside diameter | d | P | ℓ ※1 | d1 | d2 | Mounting bolts | Catalog No. | | | Color |
|-----|---------------------------------------|--|-----|-----|------|------|------------------|------------------|-------------|---------|---------------------|------------|
| | | | | | | | | | Type | PD | T 5mm increments | |
| 96 | 30 | 50 | 35 | 72 | 15 | 17.5 | 11 | M10-L Qty : 2 | ALBGB | 30 | 20 ~ 30 | R (Red) |
| 106 | 40 | 60 | 45 | 82 | | | | | | 40 | 20 ~ 40 | |
| 116 | 50 | 70 | 55 | 92 | | | | | | 50 | 20 ~ 55 | Y (Yellow) |
| 126 | 60 | 80 | 65 | 102 | | | | | | 60 | | |
| 150 | 80 | 100 | 85 | 124 | 20 | 14 | M12-L Qty : 4 | ALBGB | 80 | 20 ~ 55 | N (Blakodised) | |
| 170 | 100 | 120 | 105 | 144 | | | | | 100 | | | 20 ~ 50 |

※1 If T = 20, ℓ = 12

| ORDERING CODE | CATALOG NO. | T | Color |
|---------------|-------------|----|-------|
| | ALBGB 60 | 30 | Y |

Distance Guide Rings

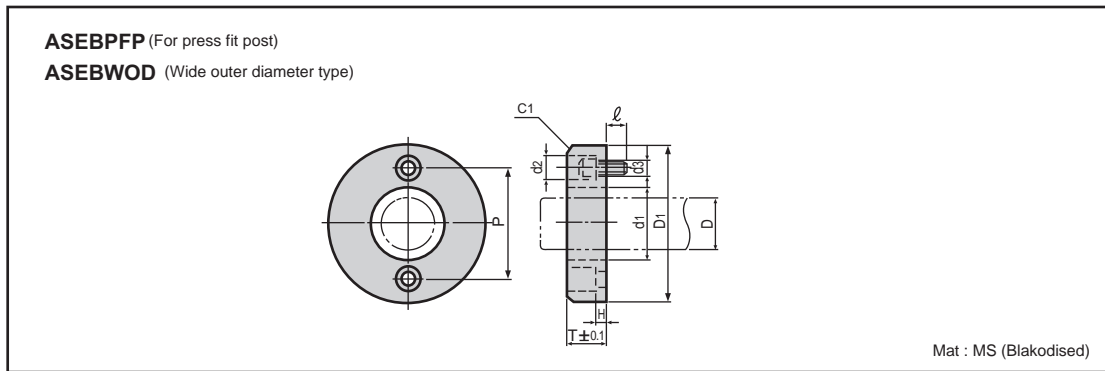
ADGR

M Material : MS (Blakodised)

| D1 | d | P | S | | d1 | d2 | ℓ | D2 | D3 | Catalog No. | | T 5mm increments | Color |
|-----|-----|-----|------|------|------|----|----|----|----|-------------|-----|---------------------|---|
| | | | T=25 | T≥30 | | | | | | Type | D | | |
| 108 | 54 | 88 | 28 | 28 | 17.5 | 11 | 15 | 38 | 50 | ADGR | 38 | 25 ~ 55 | R (Red) Y (Yellow) N (Blakodised) |
| 118 | 64 | 98 | | | | | | | | | 50 | | |
| 148 | 84 | 126 | | | | | | | | | 60 | | |
| 168 | 104 | 146 | | | | | | | | | 80 | | |
| 188 | 124 | 166 | | | | | | | | | 100 | | |

| ORDERING CODE | CATALOG NO. | T | Color |
|---------------|-------------|----|-------|
| | ADGR 38 | 20 | N |

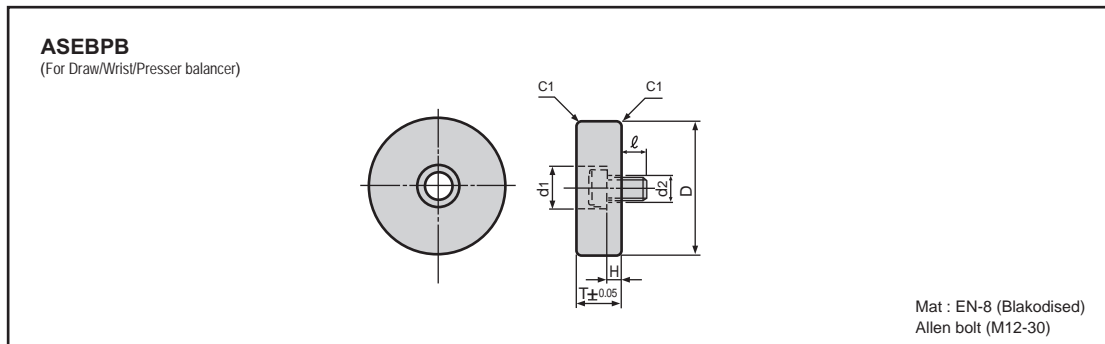
Stroke End Blocks - For Press Fit Post / Wide Outer Diameter Type



| D1 | P | d1 | T | H | d2 | d3 | Accessories Allen bolts | l | Catalog No. | | T | Color | | | |
|-----|-----|----|--------------|----|----|-----|----------------------------|----|-------------|-------|---------|------------|----|----|----------------|
| | | | | | | | | | Type | D | | | | | |
| 75 | 60 | 43 | 20 - 25 - 30 | 10 | 10 | 5.5 | M5-20 | 10 | ASEBPFP | 38 | 20 | R (Red) | | | |
| 90 | 72 | 55 | 20 - 25 | 10 | 11 | 6.5 | M6-20 | | | 50 | | | | | |
| | | | 30 - 35 - 40 | 20 | | | M6-30 | | | 60 | 25 | | | | |
| 120 | 92 | 65 | 20 - 25 | 8 | 14 | 9 | M8-20 | 12 | | 60 | 30 | Y (Yellow) | | | |
| | | | 30 - 35 - 40 | 18 | | | M8-30 | | | 80 | 35 | | | | |
| 150 | 116 | 88 | 20 - 25 | 8 | | | 18 | | | M8-20 | ASEBWOD | 15 | 50 | 15 | R (Red) |
| | | | 30 - 35 - 40 | 18 | | | | | M8-30 | 60 | | | | | |
| 120 | 100 | 54 | 15 | 5 | 14 | 9 | M8-20 | 10 | 60 | 20 | | Y (Yellow) | | | |
| 140 | 120 | 64 | 20 | 10 | | | | | | | | | 15 | 10 | N (Blakodised) |
| | | | 15 | 5 | | | | | | | | | | | |
| | | | 20 | 10 | | | | | | | | | | | |

| ORDERING CODE | CATALOG NO. | T | R - Y - N |
|---------------|-------------|---|-----------|
| ASEBPFP 60 | 20 | Y | |

Stroke End Blocks - For Draw/wrist/presser Balancer



| d1 | d2 | H | l | Catalog No. | | T | Color | | |
|----|----|----|----|-------------|----|----|------------|----|----------------|
| | | | | Type | D | | | | |
| 20 | 14 | 14 | 16 | ASEBPB | 40 | 20 | R (Red) | | |
| | | | | | | 30 | | | |
| | | | | | | 20 | | | |
| | | | | | | 30 | | | |
| | | | | | | 40 | | | |
| | | | | | | 50 | | | |
| | | | | | 60 | 20 | Y (Yellow) | | |
| | | | | | | 30 | | | |
| | | | | | | 40 | | | |
| | | | | | | 50 | | | |
| | | | | | | 70 | | 20 | N (Blakodised) |
| | | | | | | | | 30 | |
| 40 | | | | | | | | | |
| | | | | | | | | | |

| ORDERING CODE | CATALOG NO. | T | R - Y - N |
|---------------|-------------|---|-----------|
| ASEBPB 60 | 20 | Y | |