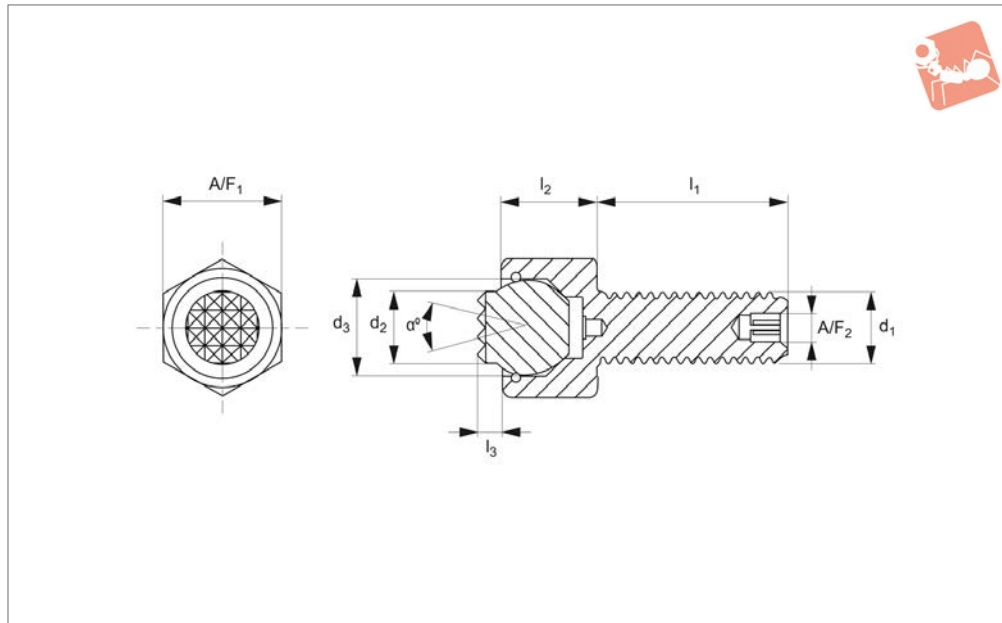




# Grippers - Self Aligning - HTS

serrated - threaded bolt

## Grippers & Rest Pads



**35530.1**

GRIPPERS & REST PADS

### Material

Body: steel, hardened to HRC 43/46, black oxide finish.

Ball: M2 high speed steel, hardened to HRC 60/62.

Viton o-ring holds ball in place and prevents ingress of other material.

### Technical Notes

These adjustable self-aligning pads serve

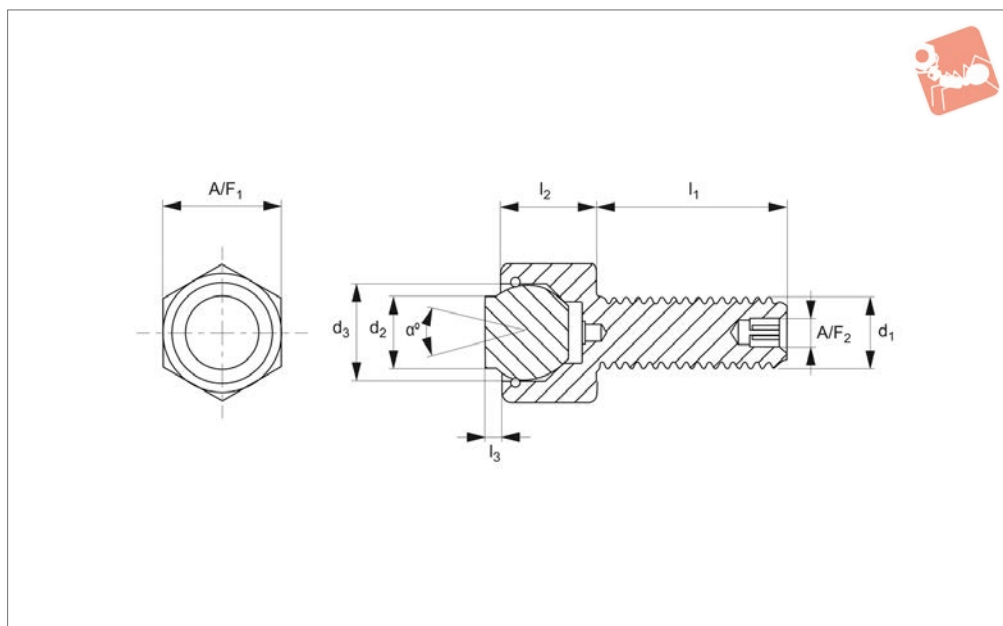
as stops, supports and thrust elements in jigs and fixtures. They can also be fitted to existing workholding elements.

Use low-profile hexagon nut (DIN 439B) for adjustment and securing if required.

Order No.	Tooth pattern	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	l <sub>1</sub>	l <sub>2</sub> ±0.05	l <sub>3</sub>	Swivel angle α	Load rating kg	A/F <sub>1</sub>	A/F <sub>2</sub>
35530.W0001	Super Fine	M6X1,0	6.0	7	12	8.0	1.5	28	935	10	-
35530.W0002	Super Fine	M6X1,0	6.0	7	12	8.0	3.0	28	935	10	-
35530.W0003	Super Fine	M6X1,0	6.0	7	25	8.0	1.5	28	935	10	-
35530.W0004	Super Fine	M6X1,0	6.0	7	25	8.0	3.0	28	935	10	-
35530.W0005	Super Fine	M6X1,0	6.0	7	40	8.0	1.5	28	935	10	-
35530.W0006	Super Fine	M6X1,0	6.0	7	40	8.0	3.0	28	935	10	-
35530.W0007	Extra Fine	M8X1,25	8.5	10	12	11.5	1.5	24	1565	13	-
35530.W0008	Extra Fine	M8X1,25	8.5	10	12	11.5	3.0	24	1565	13	-
35530.W0009	Extra Fine	M8X1,25	8.5	10	25	11.5	1.5	24	1565	13	-
35530.W0010	Extra Fine	M8X1,25	8.5	10	25	11.5	3.0	24	1565	13	-
35530.W0011	Extra Fine	M8X1,25	8.5	10	40	11.5	1.5	24	1565	13	-
35530.W0012	Extra Fine	M8X1,25	8.5	10	40	11.5	3.0	24	1565	13	-
35530.W0013	Extra Fine	M10X1,5	10.0	13	15	13.0	4.0	42	1902	17	3
35530.W0014	Extra Fine	M10X1,5	10.0	13	15	13.0	6.0	42	1902	17	3
35530.W0015	Extra Fine	M10X1,5	10.0	13	30	13.0	4.0	42	1902	17	3
35530.W0016	Extra Fine	M10X1,5	10.0	13	30	13.0	6.0	42	1902	17	3
35530.W0017	Extra Fine	M10X1,5	10.0	13	50	13.0	4.0	42	1902	17	3
35530.W0018	Extra Fine	M10X1,5	10.0	13	50	13.0	6.0	42	1902	17	3
35530.W0019	Fine	M12X1,75	12.0	15	20	15.0	4.0	45	3006	19	5
35530.W0020	Fine	M12X1,75	12.0	15	20	15.0	6.0	45	3006	19	5
35530.W0021	Fine	M12X1,75	12.0	15	40	15.0	4.0	45	3006	19	5
35530.W0022	Fine	M12X1,75	12.0	15	40	15.0	6.0	45	3006	19	5
35530.W0023	Fine	M12X1,75	12.0	15	60	15.0	4.0	45	3006	19	5
35530.W0024	Fine	M12X1,75	12.0	15	60	15.0	6.0	45	3006	19	5
35530.W0025	Fine	M16X2,0	16.0	20	25	19.0	4.0	40	5073	24	6
35530.W0027	Fine	M16X2,0	16.0	20	50	19.0	4.0	40	5073	24	6
35530.W0028	Fine	M16X2,0	16.0	20	50	19.0	6.0	40	5073	24	6
35530.W0029	Fine	M16X2,0	16.0	20	80	19.0	4.0	40	5073	24	6
35530.W0030	Fine	M16X2,0	16.0	20	80	19.0	6.0	40	5073	24	6



## 35530.2



### Material

Body: steel, hardened to HRc 43/46, black oxide finish.

Ball: M2 high speed steel, hardened to HRc 60/62.

Viton o-ring holds ball in place and prevents ingress of other material.

### Technical Notes

These adjustable self-aligning pads serve

as stops, supports and thrust elements in jigs and fixtures. They can also be fitted to existing workholding elements.

Use low-profile hexagon nut (DIN 439B) for adjustment and securing if required.

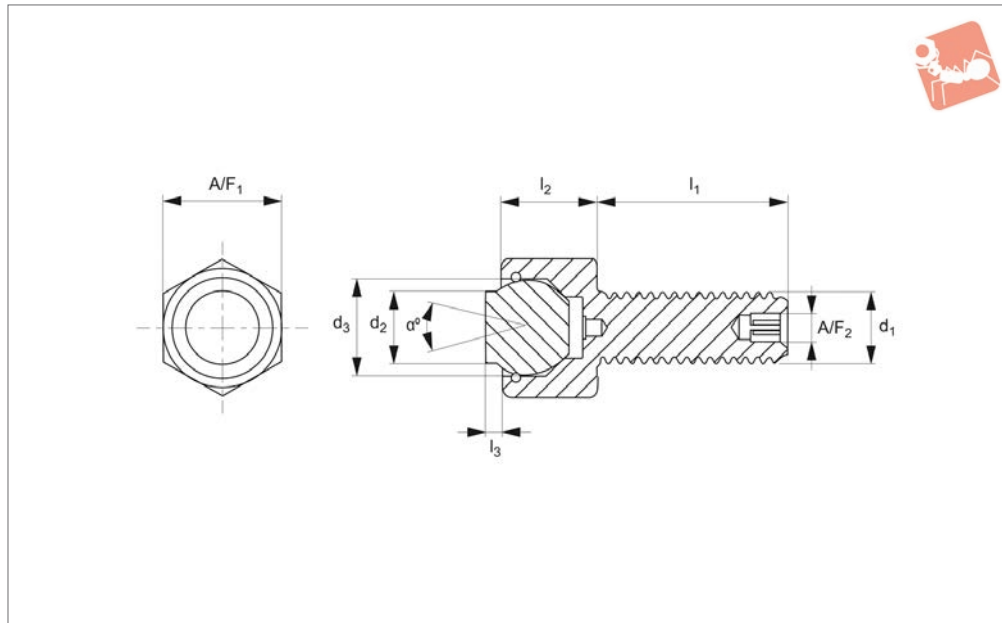
Order No.	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	l <sub>1</sub>	l <sub>2</sub> ±0.05	l <sub>3</sub>	Swivel angle a °	Load rating kg	A/F <sub>1</sub>	A/F <sub>2</sub>
35530.W0101	M6X1,0	6.0	7	12	8.0	1.5	28	935	10	-
35530.W0102	M6X1,0	6.0	7	12	8.0	3.0	28	935	10	-
35530.W0103	M6X1,0	6.0	7	25	8.0	1.5	28	935	10	-
35530.W0104	M6X1,0	6.0	7	25	8.0	3.0	28	935	10	-
35530.W0105	M6X1,0	6.0	7	40	8.0	1.5	28	935	10	-
35530.W0106	M6X1,0	6.0	7	40	8.0	3.0	28	935	10	-
35530.W0107	M8X1,25	8.5	10	12	11.5	1.5	24	1565	13	-
35530.W0108	M8X1,25	8.5	10	12	11.5	3.0	24	1565	13	-
35530.W0109	M8X1,25	8.5	10	25	11.5	1.5	24	1565	13	-
35530.W0110	M8X1,25	8.5	10	25	11.5	3.0	24	1565	13	-
35530.W0111	M8X1,25	8.5	10	40	11.5	1.5	24	1565	13	-
35530.W0112	M8X1,25	8.5	10	40	11.5	3.0	24	1565	13	-
35530.W0113	M10X1,5	10.0	13	15	13.0	4.0	42	1902	17	3
35530.W0114	M10X1,5	10.0	13	15	13.0	6.0	42	1902	17	3
35530.W0115	M10X1,5	10.0	13	30	13.0	4.0	42	1902	17	3
35530.W0116	M10X1,5	10.0	13	30	13.0	6.0	42	1902	17	3
35530.W0117	M10X1,5	10.0	13	50	13.0	4.0	42	1902	17	3
35530.W0118	M10X1,5	10.0	13	50	13.0	6.0	42	1902	17	3
35530.W0119	M12X1,75	12.0	15	20	15.0	4.0	45	3006	19	5
35530.W0120	M12X1,75	12.0	15	20	15.0	6.0	45	3006	19	5
35530.W0121	M12X1,75	12.0	15	40	15.0	4.0	45	3006	19	5
35530.W0122	M12X1,75	12.0	15	40	15.0	6.0	45	3006	19	5
35530.W0123	M12X1,75	12.0	15	60	15.0	4.0	45	3006	19	5
35530.W0124	M12X1,75	12.0	15	60	15.0	6.0	45	3006	19	5
35530.W0125	M16X2,0	16.0	20	25	19.0	4.0	40	5073	24	6
35530.W0127	M16X2,0	16.0	20	50	19.0	4.0	40	5073	24	6
35530.W0129	M16X2,0	16.0	20	80	19.0	4.0	40	5073	24	6



# Grippers - Self Aligning - Plastic

flat - threaded bolt

## Grippers & Rest Pads



**35530.3**

GRIPPERS & REST PADS

### Material

Body: steel, hardened to HRC 43/46, black oxide finish.

Ball: thermoplastic, white.

Viton o-ring holds ball in place and

prevents ingress of other material.

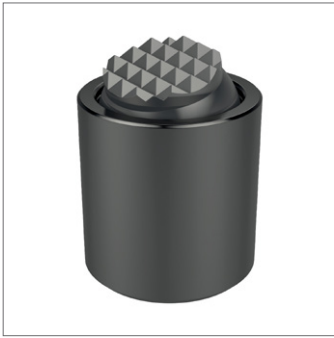
### Technical Notes

These adjustable self-aligning pads serve as stops, supports and thrust elements in

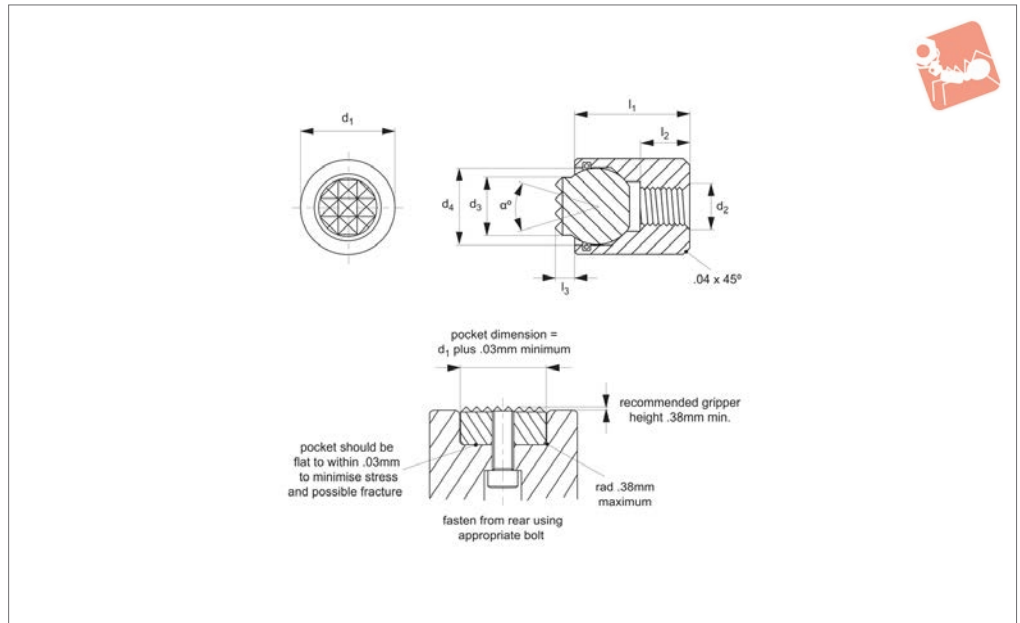
jigs and fixtures. They can also be fitted to existing workholding elements.

Use low-profile hexagon nut (DIN 439B) for adjustment and securing if required.

Order No.	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	l <sub>1</sub>	l <sub>2</sub> ±0.05	l <sub>3</sub>	Swivel angle a	A/F <sub>1</sub>	A/F <sub>2</sub>
35530.W0201	M 6X1,0	6.0	7	12	8.0	1.5	28	10	-
35530.W0202	M 6X1,0	6.0	7	12	8.0	3.0	28	10	-
35530.W0203	M 6X1,0	6.0	7	25	8.0	1.5	28	10	-
35530.W0204	M 6X1,0	6.0	7	25	8.0	3.0	28	10	-
35530.W0205	M 6X1,0	6.0	7	40	8.0	1.5	28	10	-
35530.W0206	M 6X1,0	6.0	7	40	8.0	3.0	28	10	-
35530.W0207	M 8X1,25	8.5	10	12	11.5	1.5	24	13	-
35530.W0208	M 8X1,25	8.5	10	12	11.5	3.0	24	13	-
35530.W0209	M 8X1,25	8.5	10	25	11.5	1.5	24	13	-
35530.W0210	M 8X1,25	8.5	10	25	11.5	3.0	24	13	-
35530.W0211	M 8X1,25	8.5	10	40	11.5	1.5	24	13	-
35530.W0212	M 8X1,25	8.5	10	40	11.5	3.0	24	13	-
35530.W0213	M10X1,5	10.0	13	15	13.0	4.0	42	17	3
35530.W0214	M10X1,5	10.0	13	15	13.0	6.0	42	17	3
35530.W0215	M10X1,5	10.0	13	30	13.0	4.0	42	17	3
35530.W0216	M10X1,5	10.0	13	30	13.0	6.0	42	17	3
35530.W0217	M10X1,5	10.0	13	50	13.0	4.0	42	17	3
35530.W0218	M10X1,5	10.0	13	50	13.0	6.0	42	17	3
35530.W0219	M12X1,75	12.0	15	20	15.0	4.0	45	19	5
35530.W0220	M12X1,75	12.0	15	20	15.0	6.0	45	19	5
35530.W0221	M12X1,75	12.0	15	40	15.0	4.0	45	19	5
35530.W0222	M12X1,75	12.0	15	40	15.0	6.0	45	19	5
35530.W0223	M12X1,75	12.0	15	60	15.0	4.0	45	19	5
35530.W0224	M12X1,75	12.0	15	60	15.0	6.0	45	19	5
35530.W0225	M16X2,0	16.0	20	25	19.0	4.0	40	24	6
35530.W0227	M16X2,0	16.0	20	50	19.0	4.0	40	24	6
35530.W0229	M16X2,0	16.0	20	80	19.0	4.0	40	24	6



## 35540.1



### Material

Body: steel, hardened to HRc 43/46, black oxide finish.

Ball: M2 high speed steel, hardened to HRc 60/62.

Viton o-ring holds ball in place and prevents ingress of other material.

### Technical Notes

These adjustable self-aligning pads serve

as stops, supports and thrust elements in jigs and fixtures. They can also be fitted to existing workholding elements.

Use low-profile hexagon nut (DIN 439B) for adjustment and securing if required.

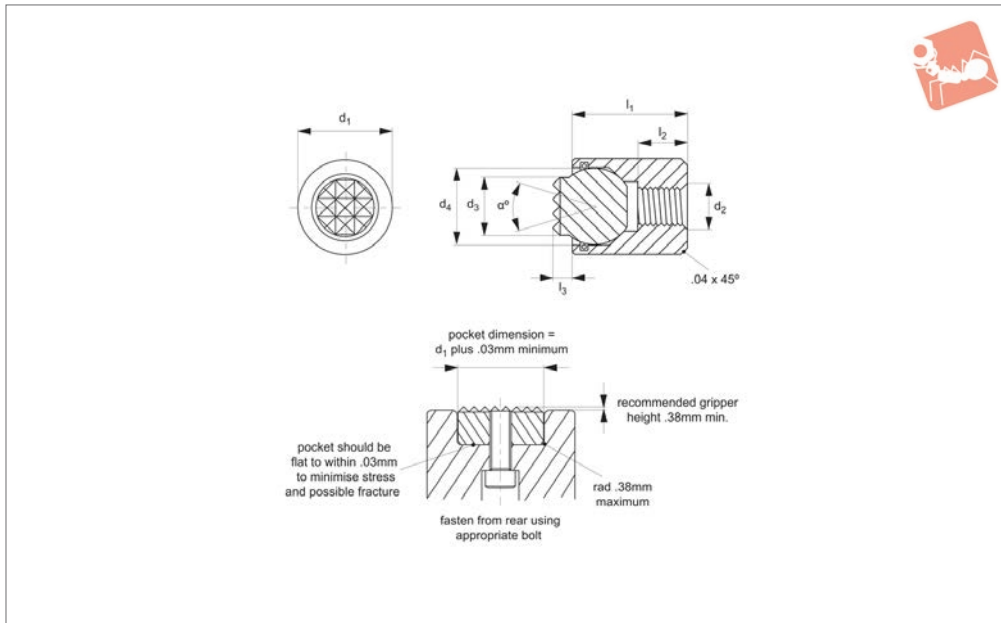
Order No.	Tooth pattern	Type	$d_1$ +0.00 -0.13	$d_2$	$d_3$	$d_4$	$l_1$ $\pm 0.05$	$l_2$ $\pm 0.25$	$l_3$	Swivel angle $\alpha$	Load rating kg
35540.W0001	Super Fine	Serrated	10	M 4x0,7	6.0	7	10.5	3.5	1.5	28	1173
35540.W0002	Super Fine	Serrated	10	M 4x0,7	6.0	7	10.5	3.5	3.0	28	1173
35540.W0003	Super Fine	Serrated	10	M 4x0,7	6.0	7	23.5	9.0	1.5	28	1173
35540.W0004	Super Fine	Serrated	10	M 4x0,7	6.0	7	23.5	9.0	3.0	28	1173
35540.W0005	Extra Fine	Serrated	13	M 5x0,8	8.5	10	14.5	6.5	1.5	24	2019
35540.W0006	Extra Fine	Serrated	13	M 5x0,8	8.5	10	14.5	6.5	3.0	24	2019
35540.W0007	Extra Fine	Serrated	13	M 5x0,8	8.5	10	23.5	9.0	1.5	24	2019
35540.W0008	Extra Fine	Serrated	13	M 5x0,8	8.5	10	23.5	9.0	3.0	24	2019
35540.W0009	Extra Fine	Serrated	17	M 6x1,0	10.0	13	18.0	7.5	4.0	42	2799
35540.W0010	Extra Fine	Serrated	17	M 6x1,0	10.0	13	18.0	7.5	6.0	42	2799
35540.W0011	Fine	Serrated	19	M 8x1,25	12.0	15	20.0	8.5	4.0	45	3941
35540.W0012	Fine	Serrated	19	M 8x1,25	12.0	15	20.0	8.5	6.0	45	3941
35540.W0013	Fine	Serrated	24	M10x1,5	16.0	20	24.0	9.0	4.0	40	5950
35540.W0014	Fine	Serrated	24	M10x1,5	16.0	20	24.0	9.0	6.0	40	5950



# Grippers - Self Aligning - HTS

flat - female threaded housing

## Grippers & Rest Pads



**35540.2**

GRIPPERS & REST PADS

### Material

Body: steel, hardened to HRC 43/46, black oxide finish.

Ball: M2 high speed steel, hardened to HRC 60/62.

Viton o-ring holds ball in place and prevents ingress of other material.

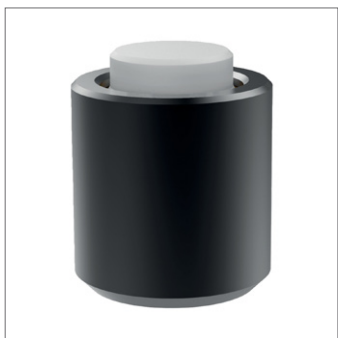
### Technical Notes

These adjustable self-aligning pads serve

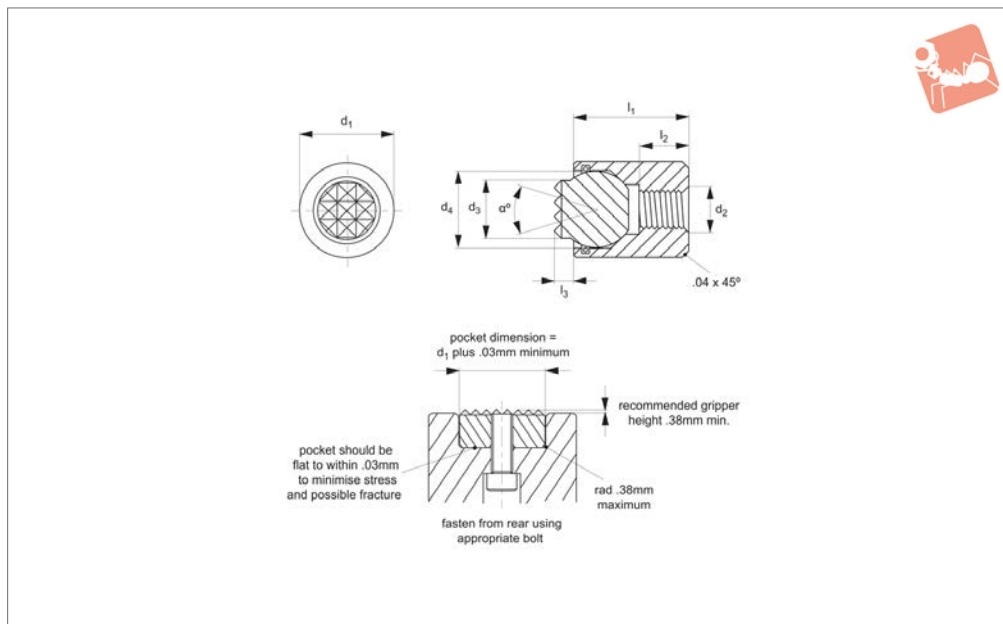
as stops, supports and thrust elements in jigs and fixtures. They can also be fitted to existing workholding elements.

Use low-profile hexagon nut (DIN 439B) for adjustment and securing if required.

Order No.	Type	$d_1$	$d_2$	$d_3$	$d_4$	$l_1$ $\pm 0.05$	$l_2$ $\pm 0.25$	$l_3$	Swivel angle $\alpha$	Load rating kg
35540.W0101	Flat, Steel	10	M 4 x 0,7	6.0	7	10.5	3.5	1.5	28	1173
35540.W0102	Flat, Steel	10	M 4 x 0,7	6.0	7	10.5	3.5	3.0	28	1173
35540.W0103	Flat, Steel	10	M 4 x 0,7	6.0	7	23.5	9.0	1.5	28	1173
35540.W0104	Flat, Steel	10	M 4 x 0,7	6.0	7	23.5	9.0	3.0	28	1173
35540.W0105	Flat, Steel	13	M 5 x 0,8	8.5	10	14.5	6.5	1.5	24	2019
35540.W0106	Flat, Steel	13	M 5 x 0,8	8.5	10	14.5	6.5	3.0	24	2019
35540.W0107	Flat, Steel	13	M 5 x 0,8	8.5	10	23.5	9.0	1.5	24	2019
35540.W0108	Flat, Steel	13	M 5 x 0,8	8.5	10	23.5	9.0	3.0	24	2019
35540.W0109	Flat, Steel	17	M 6 x 1,0	10.0	13	18.0	7.5	4.0	42	2799
35540.W0110	Flat, Steel	17	M 6 x 1,0	10.0	13	18.0	7.5	6.0	42	2799
35540.W0111	Flat, Steel	19	M 8 x 1,25	12.0	15	20.0	8.5	4.0	45	3941
35540.W0112	Flat, Steel	19	M 8 x 1,25	12.0	15	20.0	8.5	6.0	45	3941
35540.W0113	Flat, Steel	24	M10 x 1,5	16.0	20	24.0	9.0	4.0	40	5950
35540.W0114	Flat, Steel	24	M10 x 1,5	16.0	20	24.0	9.0	6.0	40	5950



## 35540.3



### Material

Body: steel, hardened to HRc 43/46, black oxide finish.

Ball: thermoplastic, white.

Viton o-ring holds ball in place and

prevents ingress of other material.

### Technical Notes

These adjustable self-aligning pads serve as stops, supports and thrust elements in

jigs and fixtures. They can also be fitted to existing workholding elements.

Use low-profile hexagon nut (DIN 439B) for adjustment and securing if required.

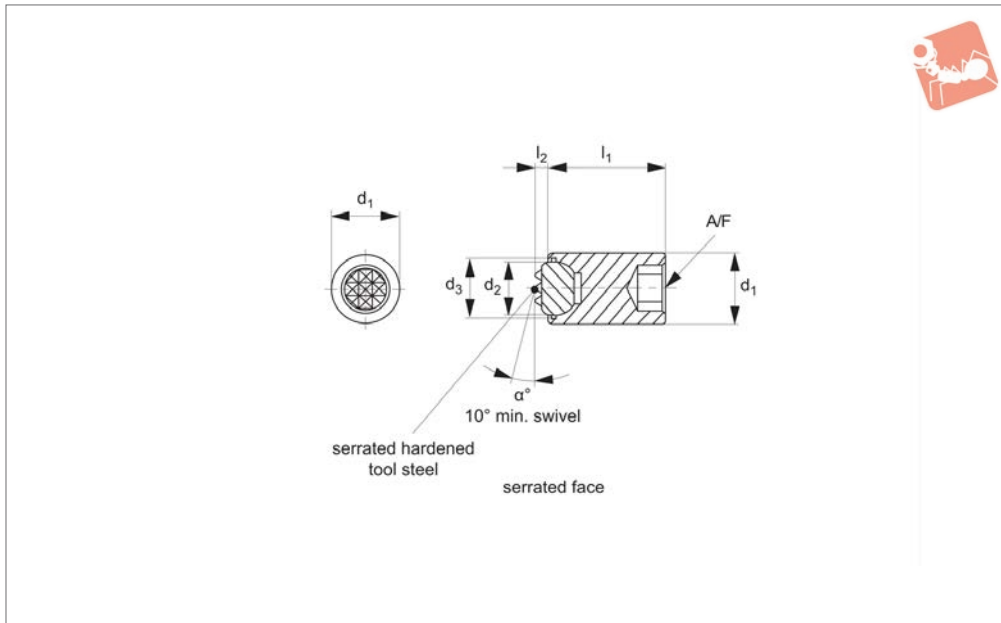
Order No.	Type	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	d <sub>4</sub>	l <sub>1</sub> ±0.05	l <sub>2</sub> ±0.25	l <sub>3</sub>	Swivel angle α
35540.W0201	Flat, Plastic	10	M 4 x 0,7	6.0	7.0	10.5	3.5	1.5	28
35540.W0202	Flat, Plastic	10	M 4 x 0,7	6.0	7.0	10.5	3.5	3.0	28
35540.W0203	Flat, Plastic	10	M 4 x 0,7	6.0	7.0	23.5	9.0	1.5	28
35540.W0204	Flat, Plastic	10	M 4 x 0,7	6.0	7.0	23.5	9.0	3.0	28
35540.W0205	Flat, Plastic	13	M 5 x 0,8	8.5	10.0	14.5	6.5	1.5	24
35540.W0206	Flat, Plastic	13	M 5 x 0,8	8.5	10.0	14.5	6.5	3.0	24
35540.W0207	Flat, Plastic	13	M 5 x 0,8	8.5	10.0	23.5	9.0	1.5	24
35540.W0208	Flat, Plastic	13	M 5 x 0,8	8.5	10.0	23.5	9.0	3.0	24
35540.W0209	Flat, Plastic	17	M 6 x 1,0	10.0	13.0	18.0	7.5	4.0	42
35540.W0210	Flat, Plastic	17	M 6 x 1,0	10.0	13.0	18.0	7.5	6.0	42
35540.W0211	Flat, Plastic	19	M 8 x 1,25	12.0	15.0	20.0	8.5	4.0	45
35540.W0212	Flat, Plastic	19	M 8 x 1,25	12.0	15.0	20.0	8.5	6.0	45
35540.W0213	Flat, Plastic	24	M10 x 1,5	16.0	20.0	24.0	9.0	4.0	40
35540.W0214	Flat, Plastic	24	M10 x 1,5	16.0	20.0	24.0	9.0	6.0	40



# Grippers - Self Aligning - HTS

serrated - set screw

## Grippers & Rest Pads



**35550.1**

GRIPPERS & REST PADS

### Material

Body: steel set screw with hardened tool steel or thermoplastic inserts.

### Technical Notes

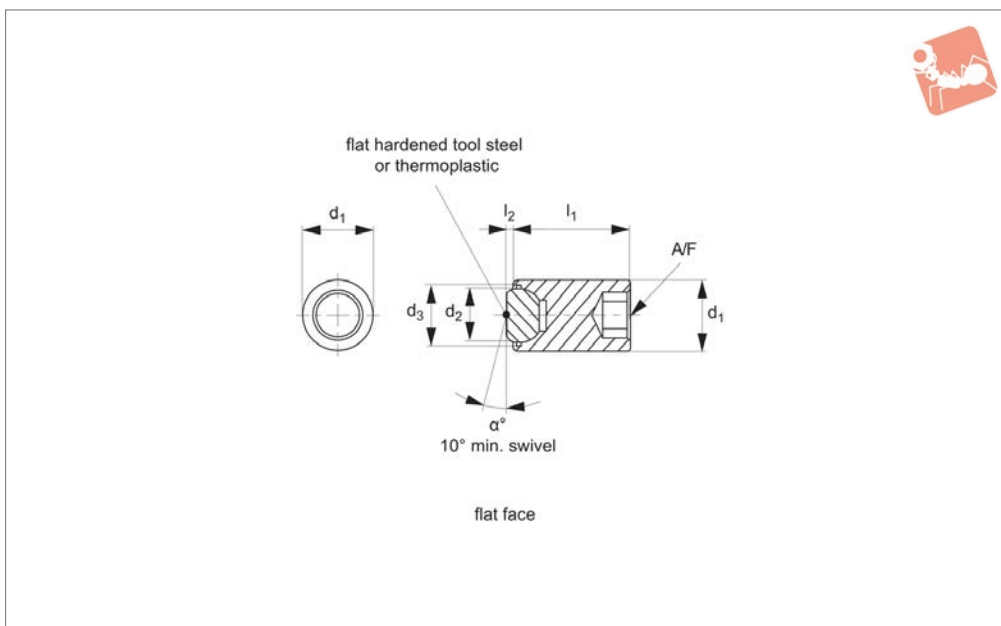
These adjustable ball end gripping screws also serve as stops, supports elements.

They can be inserted into jigs, fixtures and other workholding elements.

Order No.	Tooth pattern	$d_1$ +0.00 -0.13	$d_2$	$d_3$	$l_1$	$l_2$	Swivel angle $\alpha$	Load rating kg	A/F
35550.W0001	Super Fine	4	M10x1,5	5	25	1.5	30	-	5
35550.W0002	Super Fine	4	M10x1,5	5	35	1.5	30	-	5
35550.W0003	Super Fine	4	M10x1,5	5	50	1.5	30	-	5
35550.W0004	Super Fine	6	M12x1,75	7	25	1.5	28	1560	6
35550.W0005	Super Fine	6	M12x1,75	7	25	3.0	28	1560	6
35550.W0006	Super Fine	6	M12x1,75	7	35	1.5	28	1560	6
35550.W0007	Super Fine	6	M12x1,75	7	35	3.0	28	1560	6
35550.W0008	Super Fine	6	M12x1,75	7	50	1.5	28	1560	6
35550.W0009	Super Fine	6	M12x1,75	7	50	3.0	28	1560	6
35550.W0010	Extra Fine	8.5	M16x2,0	10	25	1.5	24	2354	8
35550.W0011	Extra Fine	8.5	M16x2,0	10	25	3.0	24	2354	8
35550.W0012	Extra Fine	8.5	M16x2,0	10	35	1.5	24	2354	8
35550.W0013	Extra Fine	8.5	M16x2,0	10	35	3.0	24	2354	8
35550.W0014	Extra Fine	8.5	M16x2,0	10	50	1.5	24	2354	8
35550.W0015	Extra Fine	8.5	M16x2,0	10	50	3.0	24	2354	8
35550.W0016	Extra Fine	10	M20x2,5	13	30	4.0	42	3800	10
35550.W0017	Extra Fine	10	M20x2,5	13	30	6.0	42	3800	10
35550.W0018	Extra Fine	10	M20x2,5	13	50	4.0	42	3800	10
35550.W0019	Extra Fine	10	M20x2,5	13	50	6.0	42	3800	10
35550.W0020	Extra Fine	10	M20x2,5	13	70	4.0	42	3800	10
35550.W0021	Extra Fine	10	M20x2,5	13	70	6.0	42	3800	10
35550.W0022	Fine	12	M24x3,0	15	40	4.0	45	5549	10
35550.W0023	Fine	12	M24x3,0	15	40	6.0	45	5549	10
35550.W0024	Fine	12	M24x3,0	15	80	4.0	45	5549	10
35550.W0025	Fine	12	M24x3,0	15	80	6.0	45	5549	10



## 35550.2



### Material

Body: steel set screw with hardened tool steel or thermoplastic inserts.

### Technical Notes

These adjustable ball end gripping screws also serve as stops, supports elements.

They can be inserted into jigs, fixtures and other workholding elements.

Order No.	$d_1$ +0.00 -0.13	$d_2$	$d_3$	$l_1$	$l_2$	Swivel angle $\alpha$	Load rating kg	A/F
35550.W0101	6.0	M12x1,75	7	25	1.5	28	1560	6
35550.W0102	6.0	M12x1,75	7	25	3.0	28	1560	6
35550.W0103	6.0	M12x1,75	7	35	1.5	28	1560	6
35550.W0104	6.0	M12x1,75	7	35	3.0	28	1560	6
35550.W0105	6.0	M12x1,75	7	50	1.5	28	1560	6
35550.W0106	6.0	M12x1,75	7	50	3.0	28	1560	6
35550.W0107	8.5	M16x2,0	10	25	1.5	24	2354	8
35550.W0108	8.5	M16x2,0	10	25	3.0	24	2354	8
35550.W0109	8.5	M16x2,0	10	35	1.5	24	2354	8
35550.W0110	8.5	M16x2,0	10	35	3.0	24	2354	8
35550.W0111	8.5	M16x2,0	10	50	1.5	24	2354	8
35550.W0112	8.5	M16x2,0	10	50	3.0	24	2354	8
35550.W0113	10.0	M20x2,5	13	30	4.0	42	3800	10
35550.W0114	10.0	M20x2,5	13	30	6.0	42	3800	10
35550.W0115	10.0	M20x2,5	13	50	4.0	42	3800	10
35550.W0116	10.0	M20x2,5	13	50	6.0	42	3800	10
35550.W0117	10.0	M20x2,5	13	70	4.0	42	3800	10
35550.W0118	10.0	M20x2,5	13	70	6.0	42	3800	10
35550.W0119	12.0	M24x3,0	15	40	4.0	45	5549	10
35550.W0120	12.0	M24x3,0	15	40	6.0	45	5549	10
35550.W0121	12.0	M24x3,0	15	80	4.0	45	5549	10
35550.W0122	12.0	M24x3,0	15	80	6.0	45	5549	10

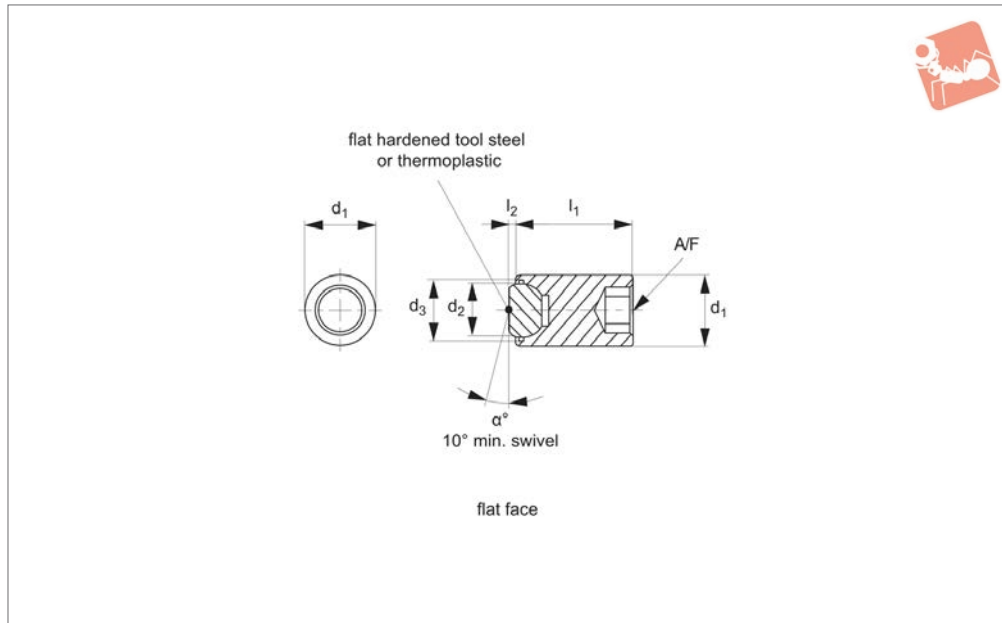




# Grippers - Self Aligning - Plastic

flat - set screw

## Grippers & Rest Pads



**35550.3**

GRIPPERS & REST PADS

### Material

Body: steel set screw with hardened tool steel or thermoplastic inserts.

### Technical Notes

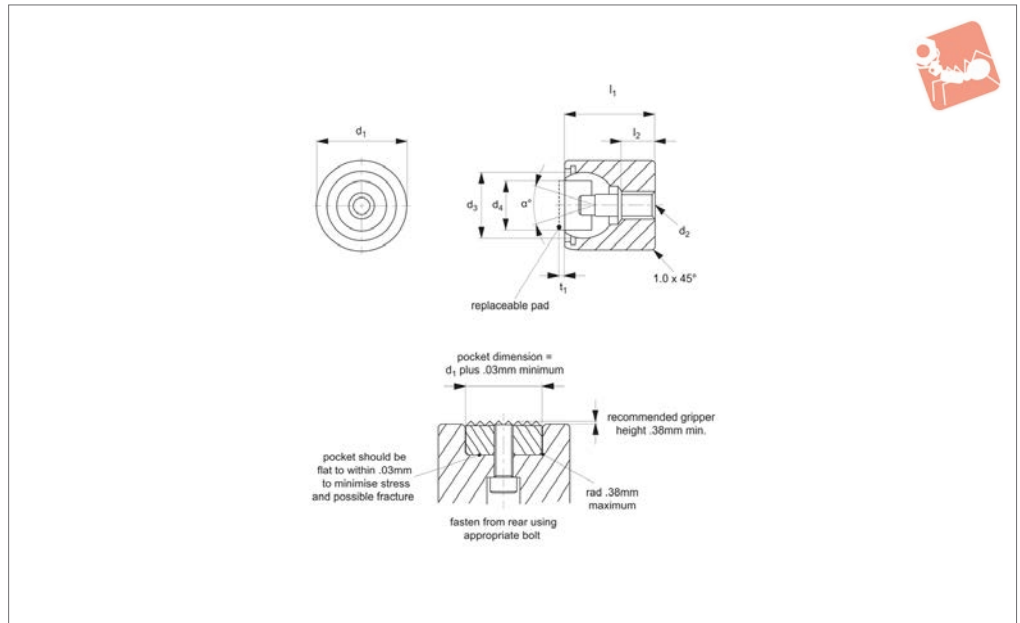
These adjustable ball end gripping screws also serve as stops, supports elements.

They can be inserted into jigs, fixtures and other workholding elements.

Order No.	$d_1$ +0.00 -0.13	$d_2$	$d_3$	$l_1$	$l_2$	Swivel angle $\alpha$	Load rating kg	A/F
35550.W0201	6.0	M12x1,75	7	25	1.5	28	1560	6
35550.W0202	6.0	M12x1,75	7	25	3.0	28	1560	6
35550.W0203	6.0	M12x1,75	7	35	1.5	28	1560	6
35550.W0204	6.0	M12x1,75	7	35	3.0	28	1560	6
35550.W0205	6.0	M12x1,75	7	50	1.5	28	1560	6
35550.W0206	6.0	M12x1,75	7	50	3.0	28	1560	6
35550.W0207	8.5	M16x2,0	10	25	1.5	24	2354	8
35550.W0208	8.5	M16x2,0	10	25	3.0	24	2354	8
35550.W0209	8.5	M16x2,0	10	35	1.5	24	2354	8
35550.W0210	8.5	M16x2,0	10	35	3.0	24	2354	8
35550.W0211	8.5	M16x2,0	10	50	1.5	24	2354	8
35550.W0212	8.5	M16x2,0	10	50	3.0	24	2354	8
35550.W0213	10.0	M20x2,5	13	30	4.0	42	3800	10
35550.W0214	10.0	M20x2,5	13	30	6.0	42	3800	10
35550.W0215	10.0	M20x2,5	13	50	4.0	42	3800	10
35550.W0216	10.0	M20x2,5	13	50	6.0	42	3800	10
35550.W0217	10.0	M20x2,5	13	70	4.0	42	3800	10
35550.W0218	10.0	M20x2,5	13	70	6.0	42	3800	10
35550.W0219	12.0	M24x3,0	15	40	4.0	45	5549	10
35550.W0220	12.0	M24x3,0	15	40	6.0	45	5549	10
35550.W0221	12.0	M24x3,0	15	80	4.0	45	5549	10
35550.W0222	12.0	M24x3,0	15	80	6.0	45	5549	10



## 35580



### Material

Body: steel, heat treated to HRC 43/46, back oxide finish.

Ball: stainless steel (440C), hardened to HRC58/60.

### Technical Notes

These adjustable self-aligning ball units

accept inserts:

- no. 35330 carbide tipped grippers.
- no. 35450 hardened tool steel grippers.
- no. 35980 steel/thermoplastic rest pads.

**These must be ordered separately.**

These parts can serve as stops, supports and thrust elements in jigs and fixtures.

They can also be fitted to existing workholding elements.

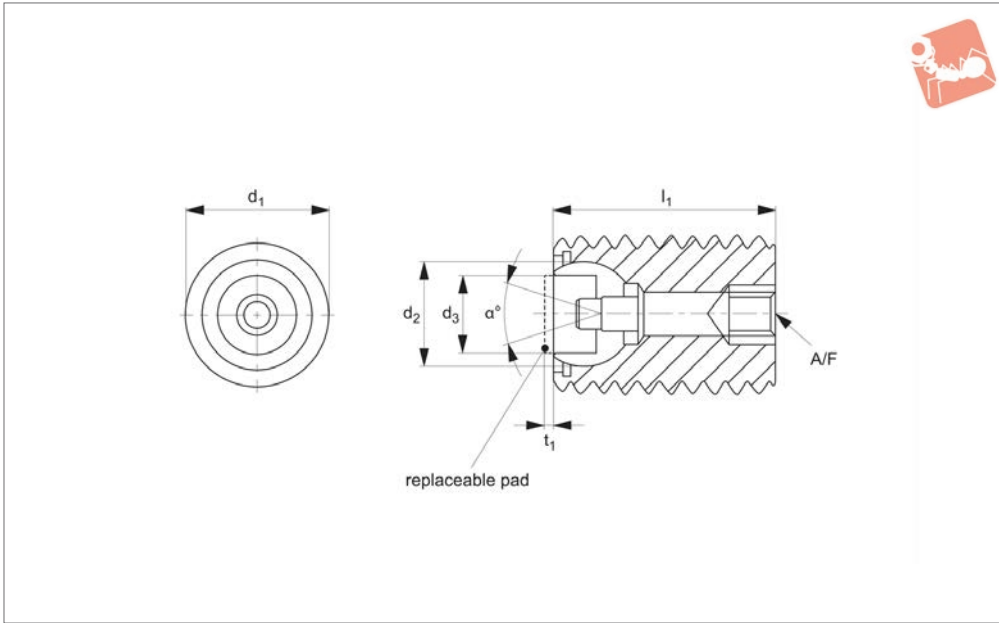
Order No.	Ball dia. $d_3$	$d_1$ +0.00 -0.13	$d_2$	Replaceable pad dia. $d_4$	$l_1$ $\pm 0.05$	$l_2$ $\pm 0.25$	$t_1$	$\alpha$ °	Load kg max.
35580.W0001	13	17	M 6x1,0	10	18	7.5	4	20	2799
35580.W0004	15	19	M 8x1,25	12	20	8.5	4	20	3941
35580.W0007	20	24	M10x1,5	16	24	9.0	4	20	5952
35580.W0010	23	30	M12x1,75	20	26	8.5	4	20	9683
35580.W0013	28	36	M12x1,75	25	32	12.0	4	20	13861



# Grippers - Self Aligning - Housing

set screw housing only

## Grippers & Rest Pads



**35590**

GRIPPERS & REST PADS

### Material

Body: steel, heat treated to HRc 43/46, back oxide finish.

Ball: stainless steel (440C), hardened to HRc 58/60.

### Technical Notes

These adjustable self-aligning ball units

accept inserts:

- no. 35330 carbide tipped grippers.
- no. 35450 hardened tool steel grippers.
- no. 35980 steel/thermoplastic rest pads.

**These must be ordered separately.**

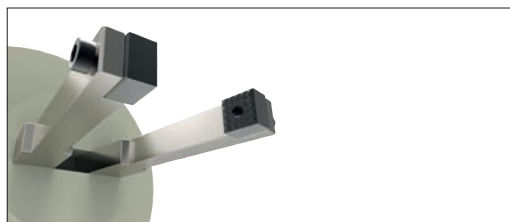
These parts can serve as stops, supports and thrust elements in jigs and fixtures.

They can also be fitted to existing workholding elements.

Order No.	Ball dia. $d_2$	$d_1$	Replaceable pad dia. $d_3$	$l_1$	$t_1$	Swivel angle $\alpha$	Load kg max.	A/F
<b>35590.W0001</b>	13	M20x2,5	10	30	6	20	3801	10
<b>35590.W0004</b>	13	M20x2,5	10	50	6	20	3801	10
<b>35590.W0007</b>	13	M20x2,5	10	70	6	20	3801	10
<b>35590.W0010</b>	15	M24x3,0	12	40	6	20	5549	10
<b>35590.W0013</b>	15	M24x3,0	12	80	6	20	5549	10



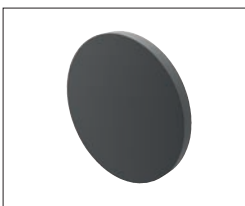
Grippers enhance workholding for multiple machining operations.



Grippers increase handling capability.

## Pads and Gripper Options

### Pads



#### Solid Carbide

High impact carbide pads, can be brazed or bonded into place.



#### Carbide Tipped

Constructed with high impact carbide pad brazed to a heat treated alloy steel body. Mount via tapped hole or a flat on the outside diameter for set screw mounting.



#### Hardened Steel

Made from 8620 steel, carburized and hardened to Rc 58/60 1.2mm with black oxide finish. Mount via tapped or counter bored hole.



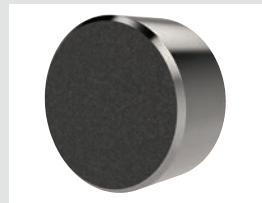
#### Non-marking Thermoplast

Made from white thermoplast. Mount via tapped or counter bored hole.



#### Stainless Steel

Pad from 17-4 stainless steel, hardened to Rc 43/46. Mount via tapped or counter bored hole.



#### Abrasive Diamond Surface

Abrasive surface permanently fused to a 17-4 stainless steel pad, hardened to Rc 43/46. The surface texture is comparable to a 100 grit abrasive. Mount via tapped or counter bored hole.



#### Soft Urethane Surface

Urethane surface is permanently bonded to a 300 series stainless steel pad. The urethane provides excellent protection against damage on delicate work surfaces. Tapped hole mounting.

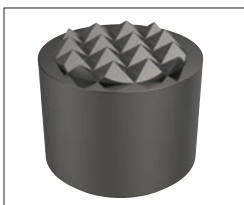
see our website for our full range:  
[wixroyd.com](http://wixroyd.com)

### Grippers



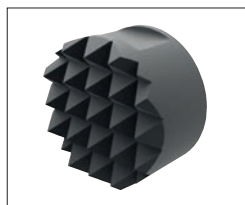
#### High Speed Tool Steel

Manufactured from M-2 high speed tool steel, hardened to Rc 60/62 with black oxide finish. Mount via tapped hole, counter bored hole or a flat on the outside diameter for set screw mounting.



#### Carbide Tipped

Constructed with high impact carbide pad brazed to a heat treated alloy steel body. Mounts via tapped hole or a flat on the outside diameter for set screw mounting.



#### Solid Carbide

Manufactured from high impact carbide in a solid gripper pad or as a solid gripper body with a threaded brazed-in steel insert. Mount via tapped hole or a flat on the outside diameter for set screw mounting.



### A Range of Specialist Gripping Pads to Suit Your Application



Unique urethane coat prevents marking of delicate components during machining or manipulation by robots. The urethane pad is permanently bonded to the stainless steel body of the gripping pad. With a bubbled texture, air is able to escape and hence avoid any suction action - enabling easy releasing of parts.

#### Urethane Coated

These are available in three different urethane durometers.



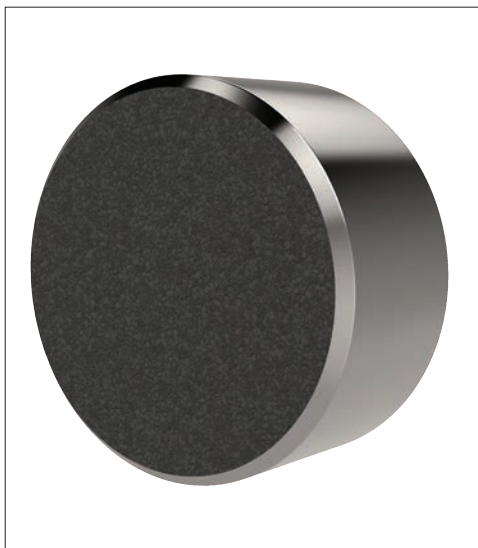
35 durometer:  
Pencil rubber top



60 durometer:  
Car tyre



80 durometer:  
Skateboard wheel



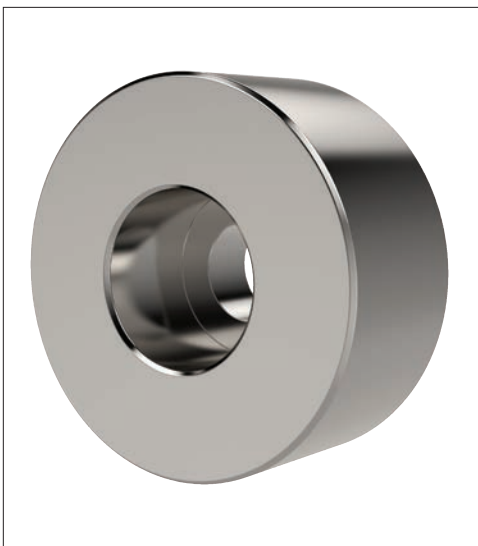
To improve handling of smooth or slippery components, with a minimum of clamping pressure, our abrasive diamond coated pads provide an excellent solution.

#### Abrasive Diamond Coated

Diamond powders are permanently fused to a 17-4 stainless pad, to provide an abrasive surface comparable to 100 grit value.



Sandpaper of 100  
grit texture



Pads of 17-4 Stainless, hardened to RC 43/46 provide solutions to applications where material selection is of greater importance; for example nuclear or food processing or pharmaceutical applications.

#### Stainless Pads