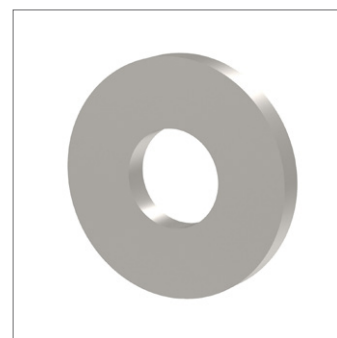
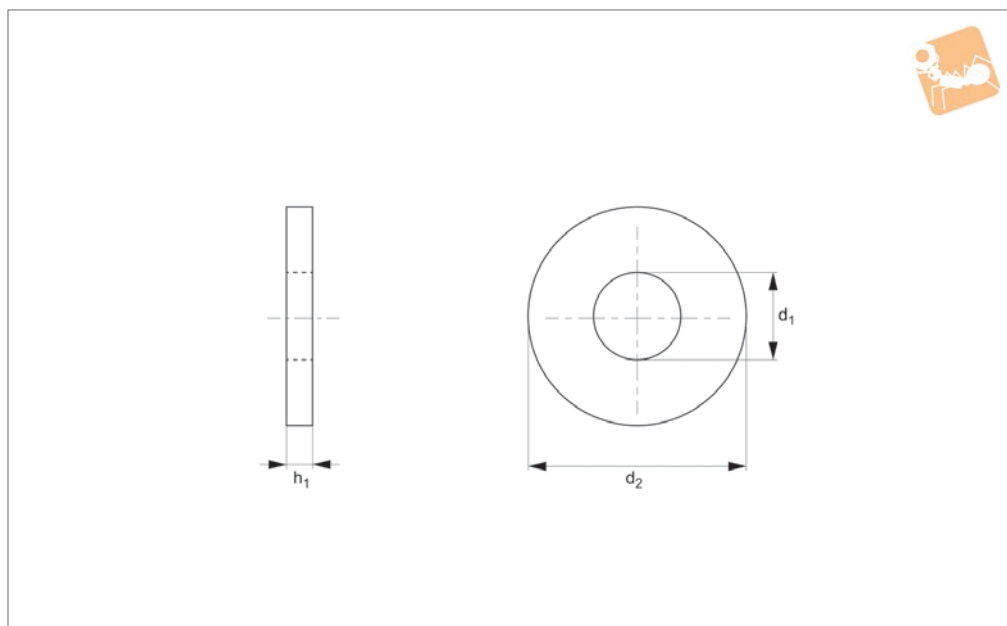




Flat Washers Form A

A4 stainless

Flat Washers



P0330.A4

FLAT WASHERS

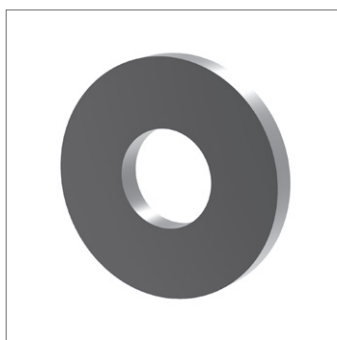
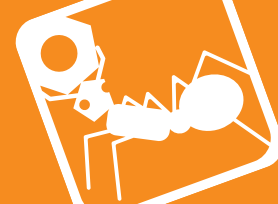
Material

Stainless steel (A4).

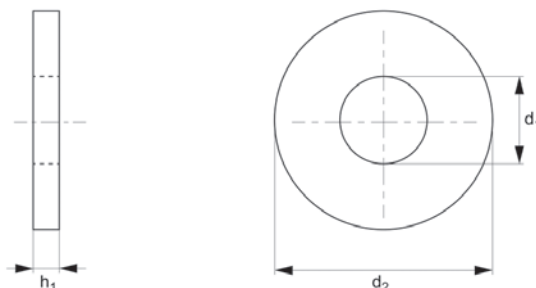
Technical Notes

To DIN 125 A.

Order No.	For thread	d ₁	d ₂	h ₁	Material
P0330.016-A4	M1,6	1.7	4	0.3	A4 s/s
P0330.020-A4	M 2	2.2	5	0.3	A4 s/s
P0330.023-A4	M2,3	2.5	6	0.5	A4 s/s
P0330.025-A4	M2,5	2.7	6	0.5	A4 s/s
P0330.030-A4	M 3	3.2	7	0.5	A4 s/s
P0330.035-A4	M3,5	3.7	8	0.5	A4 s/s
P0330.040-A4	M 4	4.3	9	0.8	A4 s/s
P0330.050-A4	M 5	5.3	10	1.0	A4 s/s
P0330.060-A4	M 6	6.4	12	1.6	A4 s/s
P0330.070-A4	M 7	7.4	14	1.6	A4 s/s
P0330.080-A4	M 8	8.4	16	1.6	A4 s/s
P0330.100-A4	M10	10.5	20	2.0	A4 s/s
P0330.120-A4	M12	13.0	24	2.5	A4 s/s
P0330.140-A4	M14	15.0	28	2.5	A4 s/s
P0330.160-A4	M16	17.0	30	3.0	A4 s/s
P0330.180-A4	M18	19.0	34	3.0	A4 s/s
P0330.200-A4	M20	21.0	37	3.0	A4 s/s
P0330.220-A4	M22	23.0	39	3.0	A4 s/s
P0330.240-A4	M24	25.0	44	4.0	A4 s/s
P0330.270-A4	M27	28.0	50	4.0	A4 s/s
P0330.300-A4	M30	31.0	56	4.0	A4 s/s



P0330.SC



Material
Steel, self-colour.

Technical Notes
To DIN 125 A.

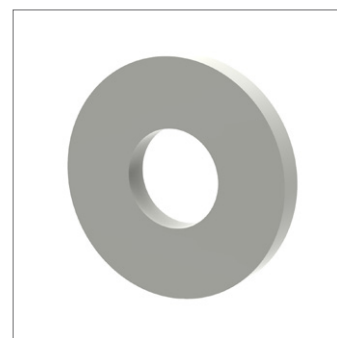
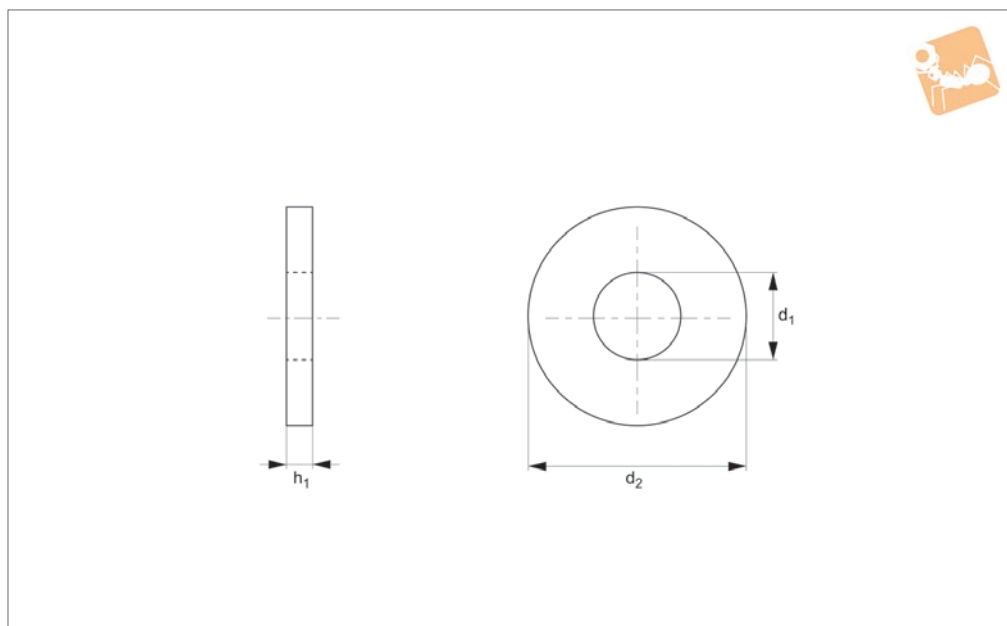
Order No.	For thread	d_1	d_2	h_1	Material
P0330.016-SC	M1,6	1.7	4	0.3	Steel SC
P0330.020-SC	M 2	2.2	5	0.3	Steel SC
P0330.023-SC	M2,3	2.5	6	0.5	Steel SC
P0330.025-SC	M2,5	2.7	6	0.5	Steel SC
P0330.030-SC	M 3	3.2	7	0.5	Steel SC
P0330.035-SC	M3,5	3.7	8	0.5	Steel SC
P0330.040-SC	M 4	4.3	9	0.8	Steel SC
P0330.050-SC	M 5	5.3	10	1.0	Steel SC
P0330.060-SC	M 6	6.4	12	1.6	Steel SC
P0330.070-SC	M 7	7.4	14	1.6	Steel SC
P0330.080-SC	M 8	8.4	16	1.6	Steel SC
P0330.100-SC	M10	10.5	20	2.0	Steel SC
P0330.120-SC	M12	13.0	24	2.5	Steel SC
P0330.140-SC	M14	15.0	28	2.5	Steel SC
P0330.160-SC	M16	17.0	30	3.0	Steel SC
P0330.180-SC	M18	19.0	34	3.0	Steel SC
P0330.200-SC	M20	21.0	37	3.0	Steel SC
P0330.220-SC	M22	23.0	39	3.0	Steel SC
P0330.240-SC	M24	25.0	44	4.0	Steel SC
P0330.270-SC	M27	28.0	50	4.0	Steel SC
P0330.300-SC	M30	31.0	56	4.0	Steel SC



Flat Washers Form A

Nylon

Flat Washers



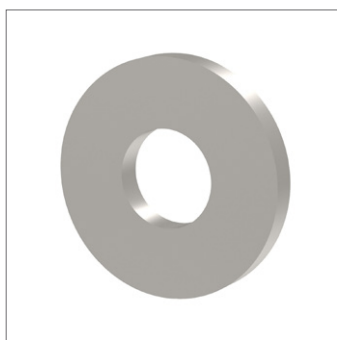
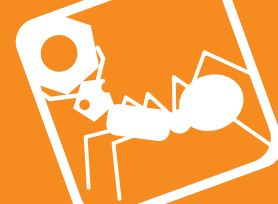
P0330.NL

FLAT WASHERS

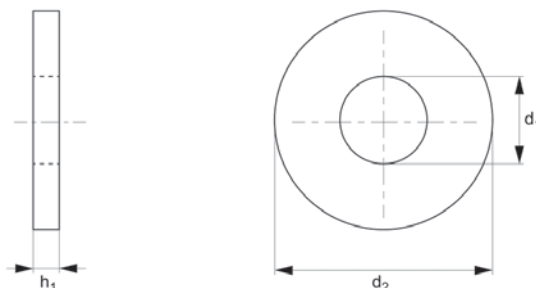
Material
Nylon.

Technical Notes
To DIN 125 A.

Order No.	For thread	d_1	d_2	h_1	Material
P0330.025-NL	M2,5	2.7	6	0.5	Nylon
P0330.030-NL	M 3	3.2	7	0.5	Nylon
P0330.040-NL	M 4	4.3	9	0.8	Nylon
P0330.050-NL	M 5	5.3	10	1.0	Nylon
P0330.060-NL	M 6	6.4	12	1.6	Nylon
P0330.080-NL	M 8	8.4	16	1.6	Nylon
P0330.100-NL	M10	10.5	20	2.0	Nylon
P0330.120-NL	M12	13.0	24	2.5	Nylon
P0330.160-NL	M16	17.0	30	3.0	Nylon
P0330.200-NL	M20	21.0	37	3.0	Nylon
P0330.240-NL	M24	25.0	44	4.0	Nylon
P0330.300-NL	M30	31.0	56	4.0	Nylon



P0330.A2



Material

Stainless steel (A2).

Technical Notes

To DIN 125 A.

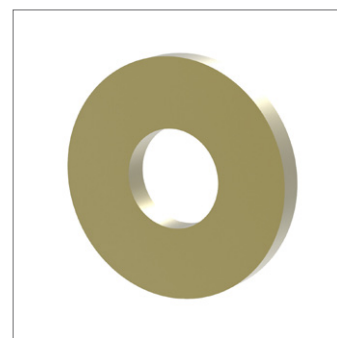
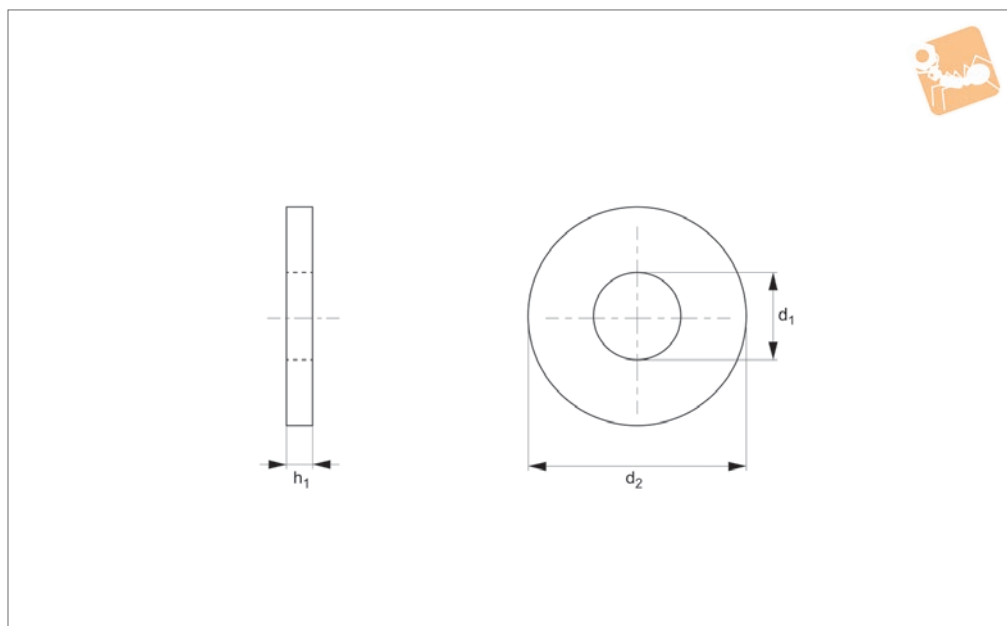
Order No.	For thread	d ₁	d ₂	h ₁	Material
P0330.016-A2	M1,6	1.7	4	0.3	A2 s/s
P0330.020-A2	M 2	2.2	5	0.3	A2 s/s
P0330.023-A2	M2,3	2.5	6	0.5	A2 s/s
P0330.025-A2	M2,5	2.7	6	0.5	A2 s/s
P0330.030-A2	M 3	3.2	7	0.5	A2 s/s
P0330.035-A2	M3,5	3.7	8	0.5	A2 s/s
P0330.040-A2	M 4	4.3	9	0.8	A2 s/s
P0330.050-A2	M 5	5.3	10	1.0	A2 s/s
P0330.060-A2	M 6	6.4	12	1.6	A2 s/s
P0330.070-A2	M 7	7.4	14	1.6	A2 s/s
P0330.080-A2	M 8	8.4	16	1.6	A2 s/s
P0330.100-A2	M10	10.5	20	2.0	A2 s/s
P0330.120-A2	M12	13.0	24	2.5	A2 s/s
P0330.140-A2	M14	15.0	28	2.5	A2 s/s
P0330.160-A2	M16	17.0	30	3.0	A2 s/s
P0330.180-A2	M18	19.0	34	3.0	A2 s/s
P0330.200-A2	M20	21.0	37	3.0	A2 s/s
P0330.220-A2	M22	23.0	39	3.0	A2 s/s
P0330.240-A2	M24	25.0	44	4.0	A2 s/s
P0330.270-A2	M27	28.0	50	4.0	A2 s/s
P0330.300-A2	M30	31.0	56	4.0	A2 s/s



Flat Washers Form A

Brass

Flat Washers



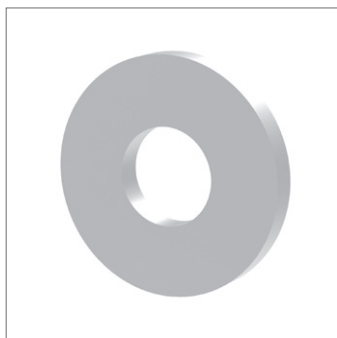
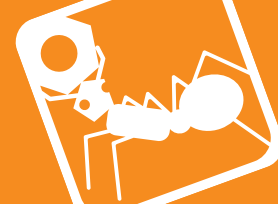
P0330.BR

FLAT WASHERS

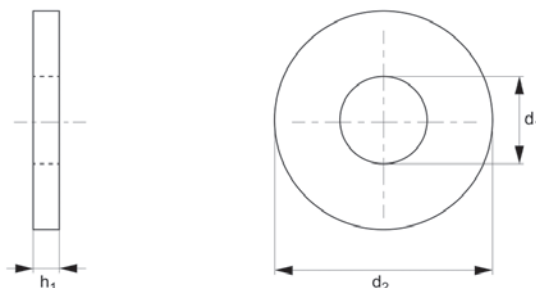
Material
Brass.

Technical Notes
To DIN 125 A.

Order No.	For thread	d ₁	d ₂	h ₁	Material
P0330.025-BR	M2,5	2.7	6	0.5	Brass
P0330.030-BR	M 3	3.2	7	0.5	Brass
P0330.053-BR	M5-3	5.3	10	1.0	Brass
P0330.043-BR	M4-5	4.3	9	0.8	Brass
P0330.064-BR	M 6	6.4	12	1.6	Brass
P0330.074-BR	M7-9	7.4	14	1.6	Brass
P0330.084-BR	M8-5	8.4	16	1.6	Brass
P0330.250-BR	M24	25	44	4.0	Brass
P0330.027-BR	M2,5	2.7	6	0.5	Brass
P0330.032-BR	M3	3.2	7	0.5	Brass
P0330.022-BR	M2-5	2.2	5	0.3	Brass



P0330.ZP



Material

Steel, zinc-plated.

Technical Notes

To DIN 125 A.

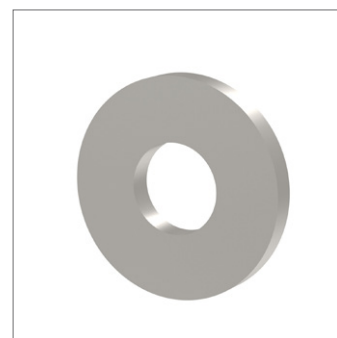
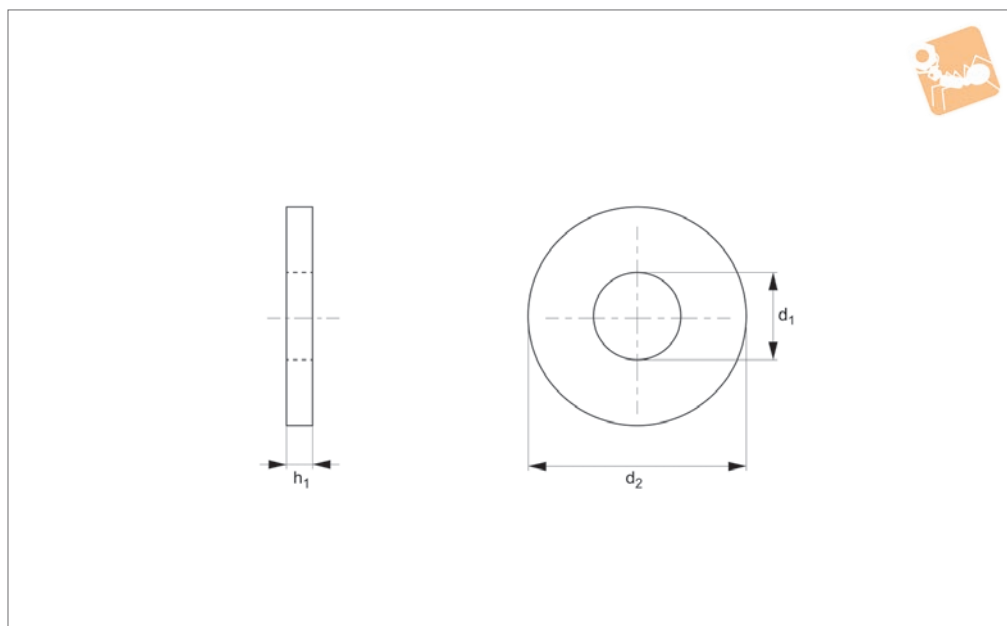
Order No.	For thread	d ₁	d ₂	h ₁	Material
P0330.016-ZP	M1,6	1.7	4	0.3	Steel ZP
P0330.020-ZP	M 2	2.2	5	0.3	Steel ZP
P0330.023-ZP	M2,3	2.5	6	0.5	Steel ZP
P0330.025-ZP	M2,5	2.7	6	0.5	Steel ZP
P0330.030-ZP	M 3	3.2	7	0.5	Steel ZP
P0330.035-ZP	M3,5	3.7	8	0.5	Steel ZP
P0330.040-ZP	M 4	4.3	9	0.8	Steel ZP
P0330.050-ZP	M 5	5.3	10	1.0	Steel ZP
P0330.060-ZP	M 6	6.4	12	1.6	Steel ZP
P0330.070-ZP	M 7	7.4	14	1.6	Steel ZP
P0330.080-ZP	M 8	8.4	16	1.6	Steel ZP
P0330.100-ZP	M10	10.5	20	2.0	Steel ZP
P0330.120-ZP	M12	13.0	24	2.5	Steel ZP
P0330.140-ZP	M14	15.0	28	2.5	Steel ZP
P0330.160-ZP	M16	17.0	30	3.0	Steel ZP
P0330.180-ZP	M18	19.0	34	3.0	Steel ZP
P0330.200-ZP	M20	21.0	37	3.0	Steel ZP
P0330.220-ZP	M22	23.0	39	3.0	Steel ZP
P0330.240-ZP	M24	25.0	44	4.0	Steel ZP
P0330.270-ZP	M27	28.0	50	4.0	Steel ZP
P0330.300-ZP	M30	31.0	56	4.0	Steel ZP



Flat Washers Form B

A2 stainless

Flat Washers



P0331.A2

FLAT WASHERS

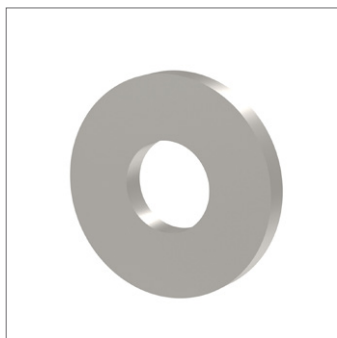
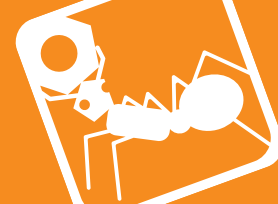
Material

Stainless steel (A2).

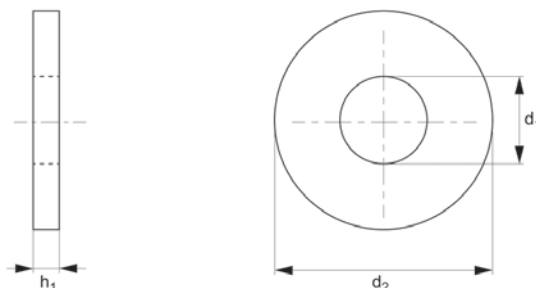
Technical Notes

To DIN 125 B, BS4320B.

Order No.	For thread	d_1	h_1	d_2	Material
P0331.050-A2	M 5	5.3	0.8	10	A2 s/s
P0331.060-A2	M 6	6.4	0.8	12.5	A2 s/s
P0331.070-A2	M 7	7.4	0.8	14	A2 s/s
P0331.080-A2	M 8	8.4	1.0	17	A2 s/s
P0331.100-A2	M10	10.5	1.25	21	A2 s/s
P0331.120-A2	M12	13.0	1.6	24	A2 s/s
P0331.140-A2	M14	15.0	1.6	28	A2 s/s
P0331.160-A2	M16	17.0	2.0	30	A2 s/s
P0331.180-A2	M18	19.0	2.0	34	A2 s/s
P0331.200-A2	M20	21.0	2.0	37	A2 s/s
P0331.220-A2	M22	23.0	2.0	39	A2 s/s
P0331.240-A2	M24	25.0	2.5	44	A2 s/s
P0331.270-A2	M27	28.0	2.5	50	A2 s/s
P0331.300-A2	M30	31.0	2.5	56	A2 s/s



P0331.A4



Material

Stainless steel (A4).

Technical Notes

To DIN 125 B, BS4320B.

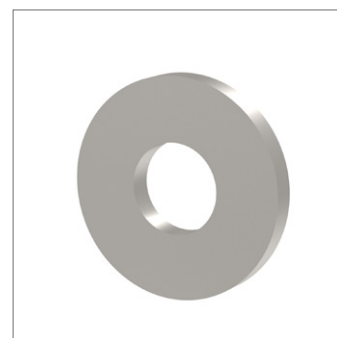
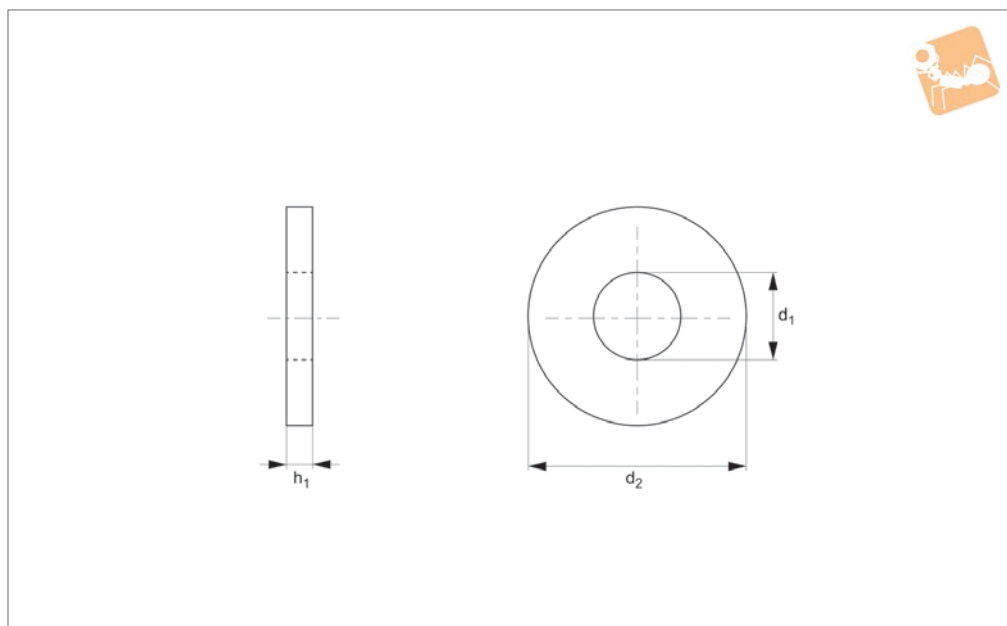
Order No.	For thread	d_1	h_1	d_2	Material
P0331.050-A4	M 5	5.3	0.8	10	A4 s/s
P0331.060-A4	M 6	6.4	0.8	12.5	A4 s/s
P0331.070-A4	M 7	7.4	0.8	14	A4 s/s
P0331.080-A4	M 8	8.4	1.0	17	A4 s/s
P0331.100-A4	M10	10.5	1.25	21	A4 s/s
P0331.120-A4	M12	13.0	1.6	24	A4 s/s
P0331.140-A4	M14	15.0	1.6	28	A4 s/s
P0331.160-A4	M16	17.0	2.0	30	A4 s/s
P0331.180-A4	M18	19.0	2.0	34	A4 s/s
P0331.200-A4	M20	21.0	2.0	37	A4 s/s
P0331.220-A4	M22	23.0	2.0	39	A4 s/s
P0331.240-A4	M24	25.0	2.5	44	A4 s/s
P0331.270-A4	M27	28.0	2.5	50	A4 s/s
P0331.300-A4	M30	31.0	2.5	56	A4 s/s



Flat Washers Form B

Steel, zinc-plated

Flat Washers



P0331.ZP

FLAT WASHERS

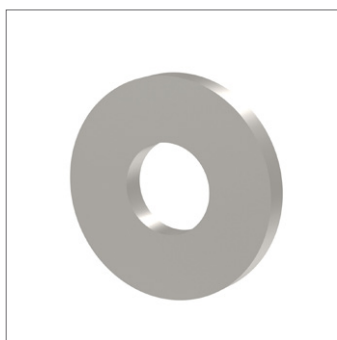
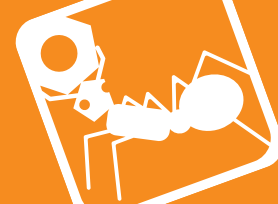
Material

Steel, zinc-plated.

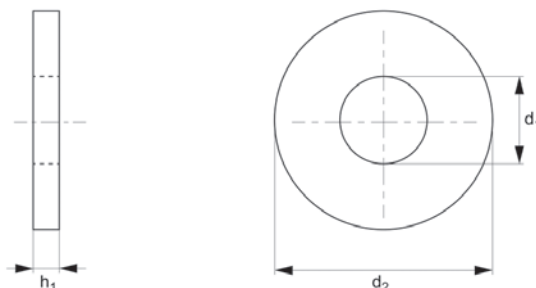
Technical Notes

To DIN 125 B, BS4320B.

Order No.	For thread	d_1	h_1	d_2	Material
P0331.050-ZP	M 5	5.3	0.8	10	Steel ZP
P0331.060-ZP	M 6	6.4	0.8	12.5	Steel ZP
P0331.070-ZP	M 7	7.4	0.8	14	Steel ZP
P0331.080-ZP	M 8	8.4	1.0	17	Steel ZP
P0331.100-ZP	M10	10.5	1.25	21	Steel ZP
P0331.120-ZP	M12	13.0	1.6	24	Steel ZP
P0331.140-ZP	M14	15.0	1.6	28	Steel ZP
P0331.160-ZP	M16	17.0	2.0	30	Steel ZP
P0331.180-ZP	M18	19.0	2.0	34	Steel ZP
P0331.200-ZP	M20	21.0	2.0	37	Steel ZP
P0331.220-ZP	M22	23.0	2.0	39	Steel ZP
P0331.240-ZP	M24	25.0	2.5	44	Steel ZP
P0331.270-ZP	M27	28.0	2.5	50	Steel ZP
P0331.300-ZP	M30	31.0	2.5	56	Steel ZP



P0331.BR



Material
Brass.

Technical Notes
To DIN 125 B, BS4320B.

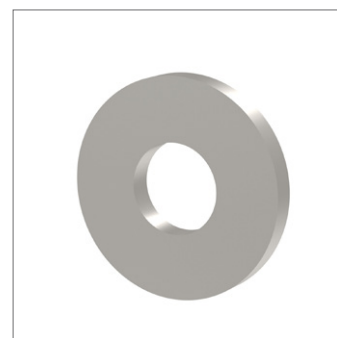
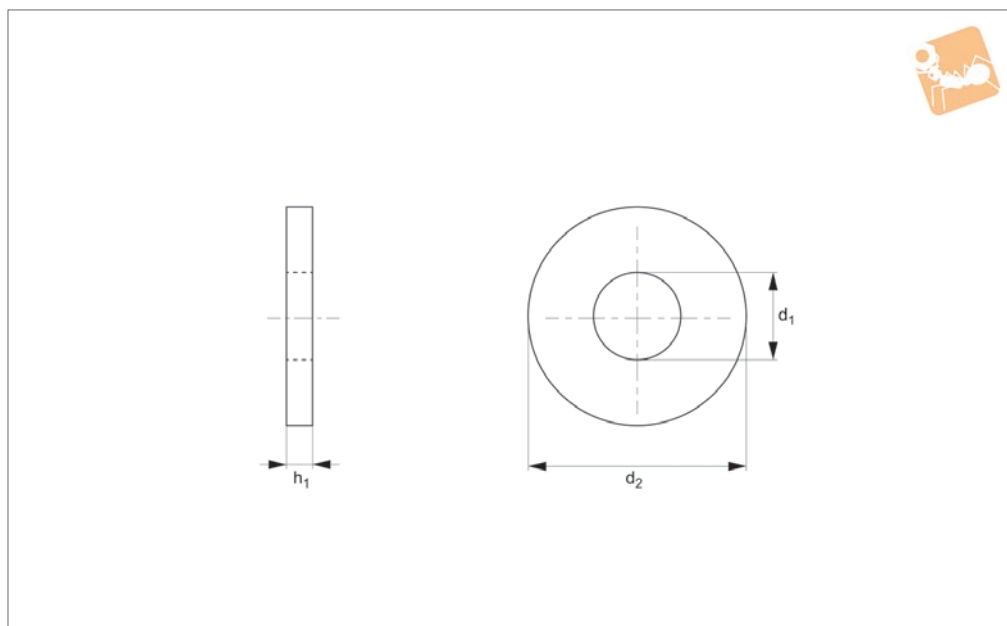
Order No.	For thread	d_1	h_1	d_2	Material
P0331.080-BR	M 8	8.4	1.6	16	Brass
P0331.100-BR	M10	10.5	2.0	20	Brass
P0331.120-BR	M12	13.0	2.5	24	Brass
P0331.160-BR	M16	17.0	3.0	30	Brass
P0331.180-BR	M18	19.0	3.0	34	Brass
P0331.200-BR	M20	21.0	3.0	37	Brass
P0331.220-BR	M22	23.0	3.0	39	Brass
P0331.240-BR	M24	25.0	4.0	44	Brass
P0331.270-BR	M27	28.0	4.0	50	Brass
P0331.300-BR	M30	31.0	4.0	56	Brass



Flat Washers Form C

A2 stainless

Flat Washers



P0332.A2

FLAT WASHERS

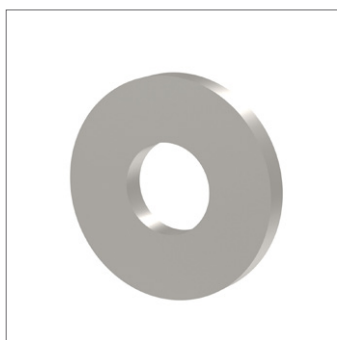
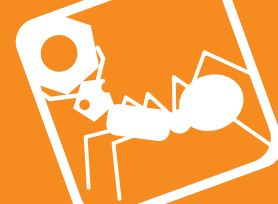
Material

Stainless steel (A2).

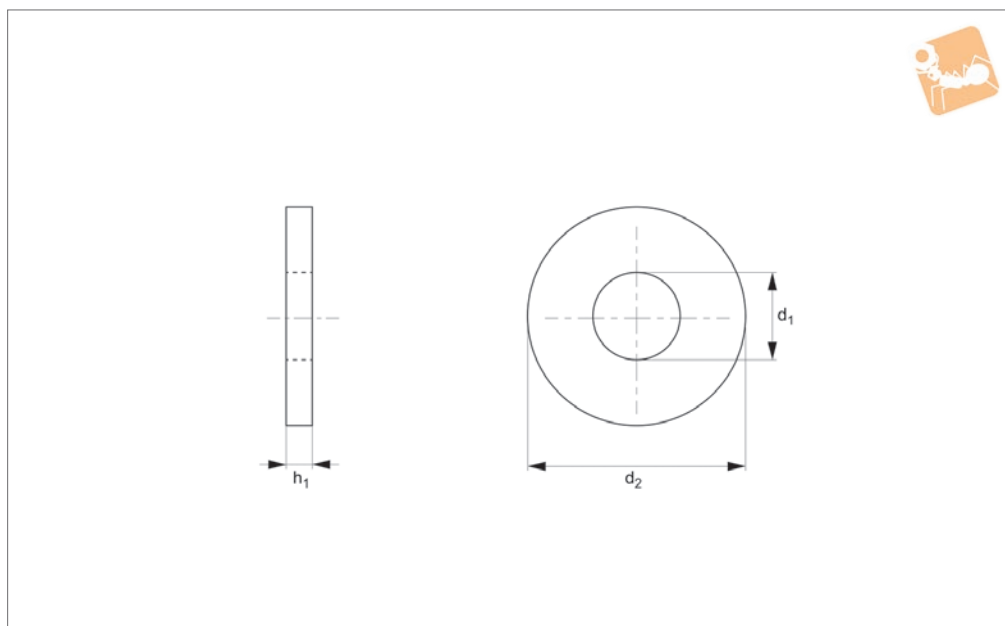
Technical Notes

To DIN 125 C, BS4320C.

Order No.	For thread	d ₁	d ₂	h	Material
P0332.040-A2	M 4	4.3	10	0.8	A2 s/s
P0332.050-A2	M 5	5.3	12.5	1.0	A2 s/s
P0332.060-A2	M 6	6.4	14	1.6	A2 s/s
P0332.070-A2	M 7	7.4	16	1.6	A2 s/s
P0332.080-A2	M 8	8.4	21	1.6	A2 s/s
P0332.100-A2	M10	10.5	24	2.0	A2 s/s
P0332.120-A2	M12	13.0	28	2.5	A2 s/s
P0332.140-A2	M14	15.0	30	2.5	A2 s/s
P0332.160-A2	M16	17.0	34	3.0	A2 s/s
P0332.180-A2	M18	19.0	37	3.0	A2 s/s
P0332.200-A2	M20	21.0	39	3.0	A2 s/s
P0332.220-A2	M22	23.0	44	3.0	A2 s/s
P0332.240-A2	M24	25.0	50	4.0	A2 s/s
P0332.270-A2	M27	28.0	56	4.0	A2 s/s
P0332.300-A2	M30	31.0	60	4.0	A2 s/s



P0332.A4



Material

Stainless steel (A4).

Technical Notes

To DIN 125 C, BS4320C.

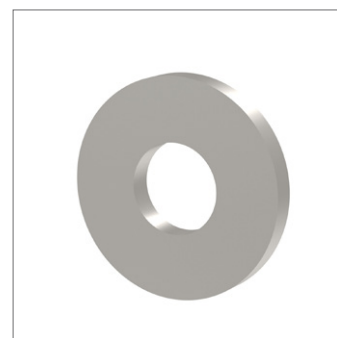
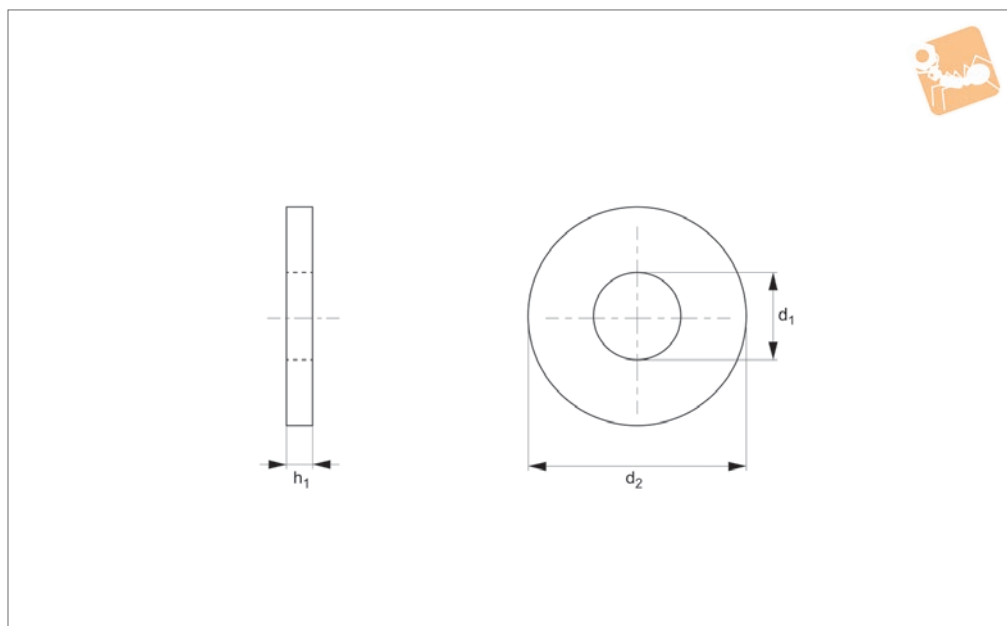
Order No.	For thread	d_1	d_2	h	Material
P0332.040-A4	M 4	4.3	10	0.8	A4 s/s
P0332.050-A4	M 5	5.3	12.5	1.0	A4 s/s
P0332.060-A4	M 6	6.4	14	1.6	A4 s/s
P0332.070-A4	M 7	7.4	16	1.6	A4 s/s
P0332.080-A4	M 8	8.4	21	1.6	A4 s/s
P0332.100-A4	M10	10.5	24	2.0	A4 s/s
P0332.120-A4	M12	13.0	28	2.5	A4 s/s
P0332.140-A4	M14	15.0	30	2.5	A4 s/s
P0332.160-A4	M16	17.0	34	3.0	A4 s/s
P0332.180-A4	M18	19.0	37	3.0	A4 s/s
P0332.200-A4	M20	21.0	39	3.0	A4 s/s
P0332.220-A4	M22	23.0	44	3.0	A4 s/s
P0332.240-A4	M24	25.0	50	4.0	A4 s/s
P0332.270-A4	M27	28.0	56	4.0	A4 s/s
P0332.300-A4	M30	31.0	60	4.0	A4 s/s



Flat Washers Form C

Steel, zinc-plated

Flat Washers



P0332.ZP

FLAT WASHERS

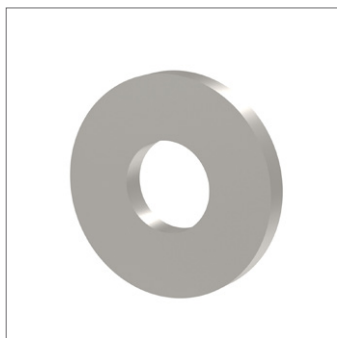
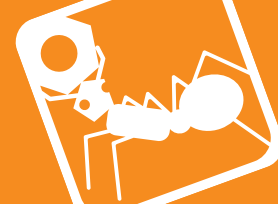
Material

Steel, zinc-plated.

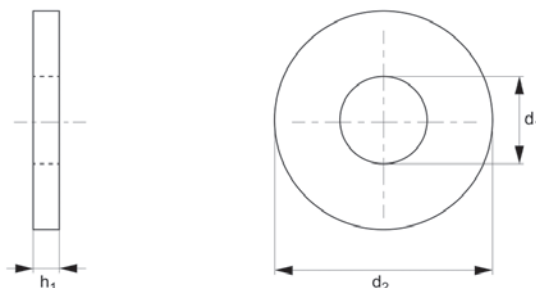
Technical Notes

To DIN 125 C, BS4320C.

Order No.	For thread	d ₁	d ₂	h	Material
P0332.040-ZP	M 4	4.3	10	0.8	Steel ZP
P0332.050-ZP	M 5	5.3	12.5	1.0	Steel ZP
P0332.060-ZP	M 6	6.4	14	1.6	Steel ZP
P0332.070-ZP	M 7	7.4	16	1.6	Steel ZP
P0332.080-ZP	M 8	8.4	21	1.6	Steel ZP
P0332.100-ZP	M10	10.5	24	2.0	Steel ZP
P0332.120-ZP	M12	13.0	28	2.5	Steel ZP
P0332.140-ZP	M14	15.0	30	2.5	Steel ZP
P0332.160-ZP	M16	17.0	34	3.0	Steel ZP
P0332.180-ZP	M18	19.0	37	3.0	Steel ZP
P0332.200-ZP	M20	21.0	39	3.0	Steel ZP
P0332.220-ZP	M22	23.0	44	3.0	Steel ZP
P0332.240-ZP	M24	25.0	50	4.0	Steel ZP
P0332.270-ZP	M27	28.0	56	4.0	Steel ZP
P0332.300-ZP	M30	31.0	60	4.0	Steel ZP



P0333.A2



Material

Stainless steel (A2).

Technical Notes

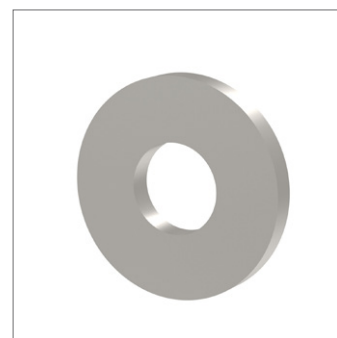
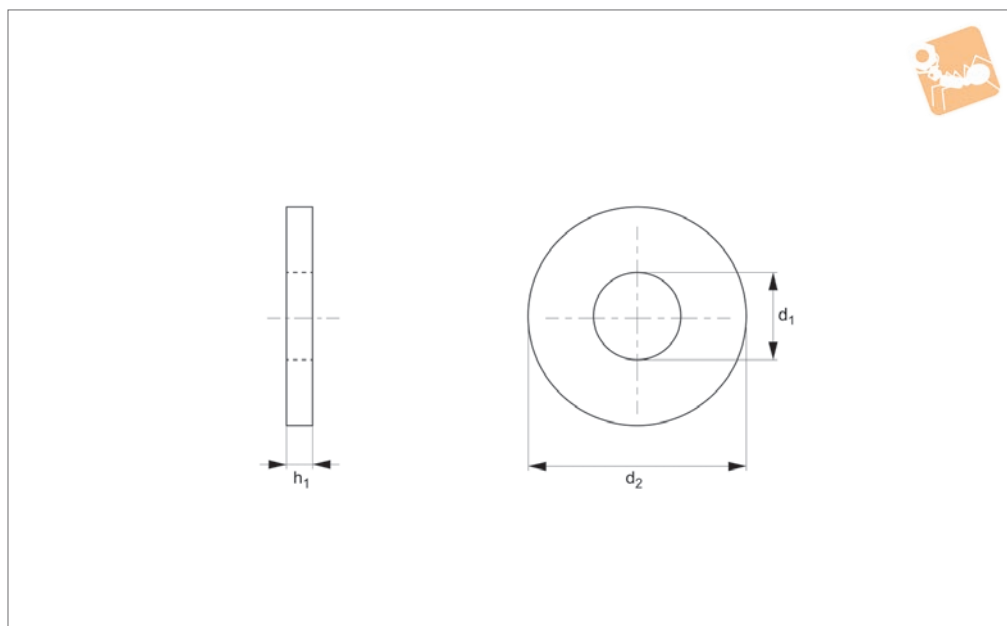
Also known as Mudguard washers.

Order No.	For thread	d ₁	d ₂	h ₁	Material
P0333.030-010-A2	M 3	3.3	10	0.8	A2 s/s
P0333.040-020-A2	M 4	4.2	20	1.0	A2 s/s
P0333.050-020-A2	M 5	5.2	20	1.3	A2 s/s
P0333.050-025-A2	M 5	5.2	25	1.3	A2 s/s
P0333.050-030-A2	M 5	5.2	30	1.3	A2 s/s
P0333.060-025-A2	M 6	6.5	25	1.5	A2 s/s
P0333.060-030-A2	M 6	6.5	30	1.5	A2 s/s
P0333.060-040-A2	M 6	6.5	40	1.5	A2 s/s
P0333.070-040-A2	M 7	7.4	40	1.5	A2 s/s
P0333.080-025-A2	M 8	8.4	25	1.5	A2 s/s
P0333.080-030-A2	M 8	8.4	30	1.5	A2 s/s
P0333.080-040-A2	M 8	8.4	40	1.5	A2 s/s
P0333.100-030-A2	M10	10.5	30	1.5	A2 s/s
P0333.120-036-A2	M12	12.5	36	2.0	A2 s/s
P0333.140-036-A2	M14	14.5	36	2.0	A2 s/s
P0333.160-050-A2	M16	16.5	50	2.5	A2 s/s
P0333.200-055-A2	M20	20.2	55	2.5	A2 s/s
P0333.240-085-A2	M24	25.0	85	4.0	A2 s/s



Penny Washers mudguard washers

Flat Washers



P0333.A4

FLAT WASHERS

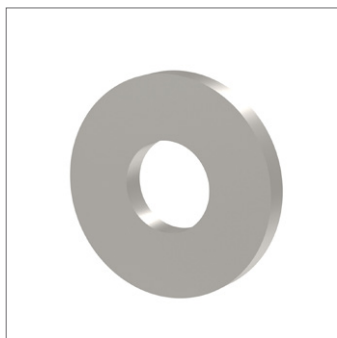
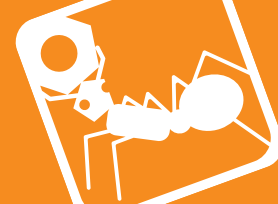
Material

Stainless steel (A4).

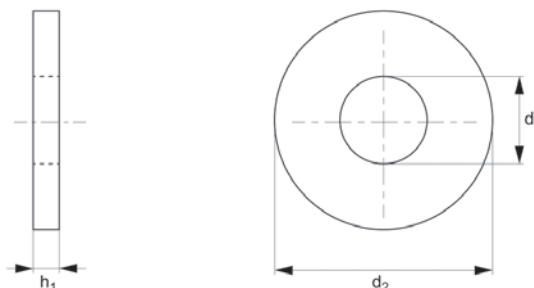
Technical Notes

Also known as Mudguard washers.

Order No.	For thread	d ₁	d ₂	h ₁	Material
P0333.040-020-A4	M 4	4.2	20	1.2	A4 s/s
P0333.050-020-A4	M 5	5.2	20	1.3	A4 s/s
P0333.060-018-A4	M 6	6.5	18	1.5	A4 s/s
P0333.060-020-A4	M 6	6.5	20	1.5	A4 s/s
P0333.060-025-A4	M 6	6.5	25	1.5	A4s/s
P0333.060-030-A4	M 6	6.5	30	1.5	A4 s/s
P0333.080-025-A4	M 8	8.4	25	1.5	A4 s/s
P0333.080-030-A4	M 8	8.4	30	1.5	A4 s/s
P0333.100-025-A4	M10	10.5	25	1.5	A4 s/s
P0333.100-030-A4	M10	10.5	30	1.5	A4 s/s
P0333.100-035-A4	M10	10.5	35	1.5	A4 s/s
P0333.120-036-A4	M12	13.0	36	2.0	A4 s/s
P0333.160-036-A4	M16	16.5	36	2.5	A4 s/s



P0333.ZP



Material

Steel, zinc-plated.

Technical Notes

Also known as Mudguard washers.

Order No.	For thread	d ₁	d ₂	h ₁	Material
P0333.030-010-ZP	M 3	3.3	10	0.8	Steel ZP
P0333.040-020-ZP	M 4	4.2	20	1.2	Steel ZP
P0333.050-020-ZP	M 5	5.2	20	1.3	Steel ZP
P0333.050-025-ZP	M 5	5.2	25	1.3	Steel ZP
P0333.050-030-ZP	M 5	5.2	30	1.3	Steel ZP
P0333.060-014-ZP	M 6	6.5	14	1.5	Steel ZP
P0333.060-020-ZP	M 6	6.5	20	1.5	Steel ZP
P0333.060-025-ZP	M 6	6.5	25	1.5	Steel ZP
P0333.060-027-ZP	M 6	6.5	27	1.5	Steel ZP
P0333.060-030-ZP	M 6	6.5	30	1.5	Steel ZP
P0333.060-035-ZP	M 6	6.5	35	1.5	Steel ZP
P0333.060-038-ZP	M 6	6.5	38	1.5	Steel ZP
P0333.060-040-ZP	M 6	6.5	40	1.5	Steel ZP
P0333.070-020-ZP	M 7	7.4	20	1.5	Steel ZP
P0333.070-025-ZP	M 7	7.4	25	1.5	Steel ZP
P0333.070-030-ZP	M 7	7.4	30	1.5	Steel ZP
P0333.080-025-ZP	M 8	8.4	25	1.5	Steel ZP
P0333.080-030-ZP	M 8	8.4	30	1.5	Steel ZP
P0333.080-035-ZP	M 8	8.4	35	1.5	Steel ZP
P0333.080-038-ZP	M 8	8.4	38	1.5	Steel ZP
P0333.080-040-ZP	M 8	8.4	40	1.5	Steel ZP
P0333.080-045-ZP	M 8	8.4	45	1.5	Steel ZP
P0333.080-050-ZP	M 8	8.4	50	1.5	Steel ZP
P0333.100-030-ZP	M10	10.5	30	1.5	Steel ZP
P0333.100-035-ZP	M10	10.5	35	1.5	Steel ZP
P0333.100-038-ZP	M10	10.5	38	1.5	Steel ZP
P0333.100-040-ZP	M10	10.5	40	1.5	Steel ZP
P0333.100-050-ZP	M10	10.5	50	1.5	Steel ZP
P0333.100-060-ZP	M10	10.5	60	1.5	Steel ZP
P0333.110-035-ZP	M11	11.5	35	1.5	Steel ZP
P0333.120-030-ZP	M12	12.5	30	2.0	Steel ZP
P0333.120-036-ZP	M12	12.5	36	2.0	Steel ZP
P0333.120-040-ZP	M12	12.5	40	2.0	Steel ZP
P0333.120-060-ZP	M12	12.5	60	2.0	Steel ZP
P0333.140-036-ZP	M14	14.5	36	2.0	Steel ZP



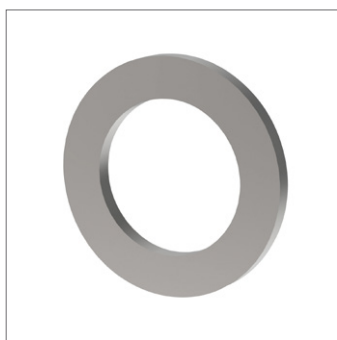
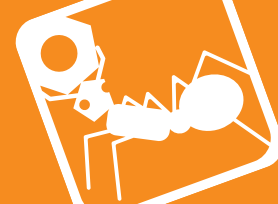
Penny Washers

mudguard washers

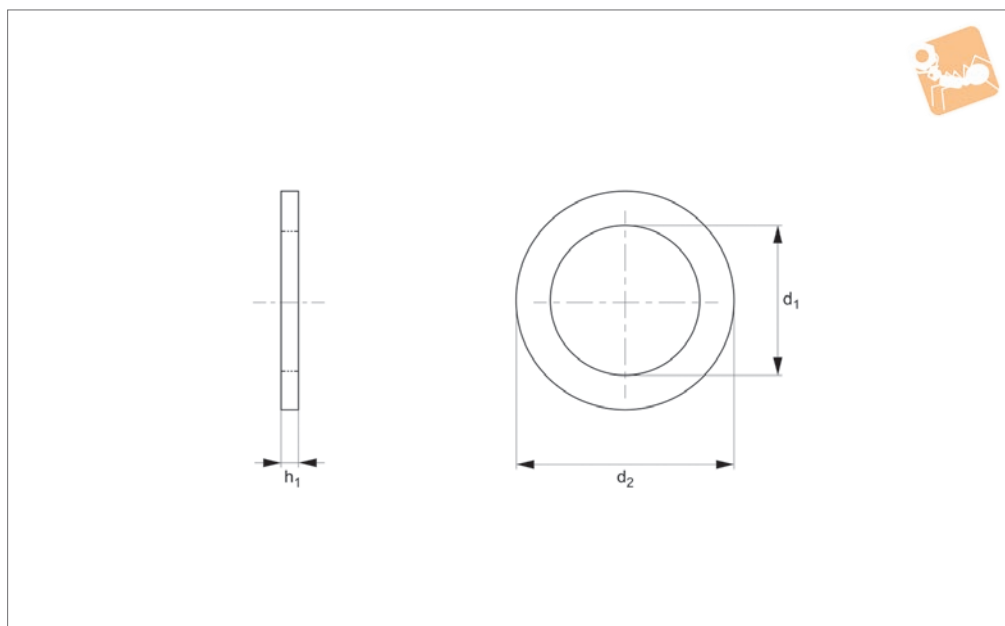
Flat Washers

Order No.	For thread	d ₁	d ₂	h ₁	Material
P0333.140-040-ZP	M14	14.5	40	2.0	Steel ZP
P0333.140-045-ZP	M14	14.5	45	2.0	Steel ZP
P0333.160-040-ZP	M16	16.5	40	2.5	Steel ZP
P0333.160-045-ZP	M16	16.5	45	2.5	Steel ZP
P0333.160-050-ZP	M16	16.5	50	2.5	Steel ZP
P0333.170-040-ZP	M17	17.2	40	2.5	Steel ZP
P0333.170-045-ZP	M17	17.2	45	2.5	Steel ZP
P0333.200-050-ZP	M20	20.2	50	2.5	Steel ZP
P0333.200-055-ZP	M20	20.2	55	2.5	Steel ZP
P0333.220-075-ZP	M22	24.0	75	4.0	Steel ZP
P0333.240-080-ZP	M24	25.0	80	4.0	Steel ZP
P0333.240-085-ZP	M24	25.0	85	4.0	Steel ZP
P0333.270-085-ZP	M27	28.0	85	4.0	Steel ZP
P0333.300-095-ZP	M30	32.0	95	4.0	Steel ZP

FLAT WASHERS



P0335.A2



Material

Stainless steel (A2, AISI 303).

Technical Notes

To DIN 433.

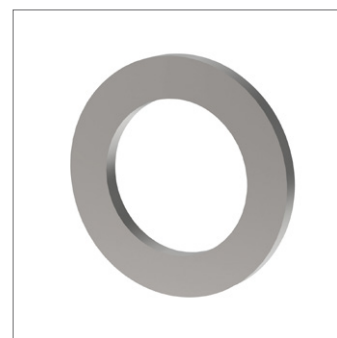
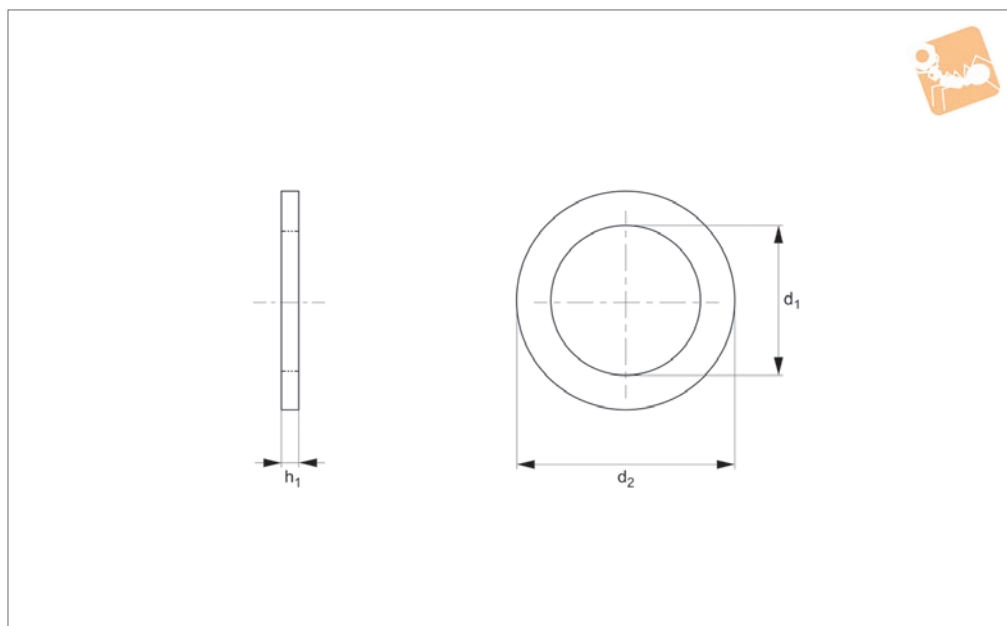
Order No.	d_1	d_2	For thread	h_1	Material
P0335.014-A2	1.5	3	M1,4	0.3	A2 s/s
P0335.016-A2	1.7	3.5	M1,6	0.3	A2 s/s
P0335.020-A2	2.2	4.5	M 2	0.3	A2 s/s
P0335.025-A2	2.7	5	M2,5	0.5	A2 s/s
P0335.030-A2	3.2	6	M 3	0.5	A2 s/s
P0335.035-A2	3.7	7	M3,5	0.5	A2 s/s
P0335.040-A2	4.3	8	M 4	0.5	A2 s/s
P0335.050-A2	5.3	9	M 5	1.0	A2 s/s
P0335.060-A2	6.4	11	M 6	1.6	A2 s/s
P0335.080-A2	8.4	15	M 8	1.6	A2 s/s
P0335.100-A2	10.5	18	M10	1.6	A2 s/s
P0335.120-A2	13	20	M12	2.0	A2 s/s
P0335.140-A2	15	24	M14	2.5	A2 s/s
P0335.160-A2	17	28	M16	2.5	A2 s/s
P0335.180-A2	19	30	M18	2.5	A2 s/s
P0335.200-A2	21	34	M20	3.0	A2 s/s



Flat Washer

A4 stainless

Flat Washers



P0335.A4

FLAT WASHERS

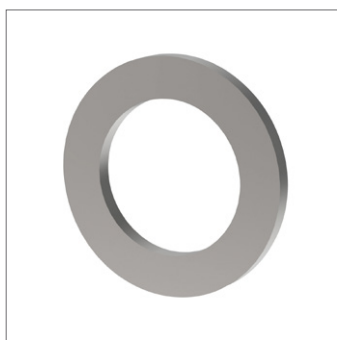
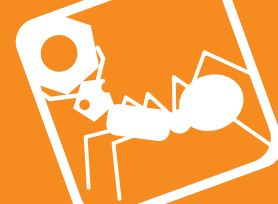
Material

Stainless steel (A4, AISI 316).

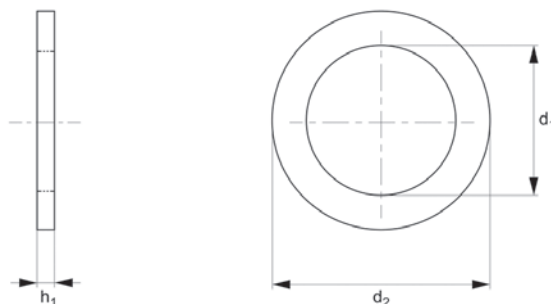
Technical Notes

To DIN 433.

Order No.	d_1	d_2	For thread	h_1	Material
P0335.014-A4	1.5	3	M1,4	0.3	A4 s/s
P0335.016-A4	1.7	3.5	M1,6	0.3	A4 s/s
P0335.020-A4	2.2	4.5	M 2	0.3	A4 s/s
P0335.025-A4	2.7	5	M2,5	0.5	A4 s/s
P0335.030-A4	3.2	6	M 3	0.5	A4 s/s
P0335.035-A4	3.7	7	M3,5	0.5	A4 s/s
P0335.040-A4	4.3	8	M 4	0.5	A4 s/s
P0335.050-A4	5.3	9	M 5	1.0	A4 s/s
P0335.060-A4	6.4	11	M 6	1.6	A4 s/s
P0335.080-A4	8.4	15	M 8	1.6	A4 s/s
P0335.100-A4	10.5	18	M10	1.6	A4 s/s
P0335.120-A4	13	20	M12	2.0	A4 s/s
P0335.140-A4	15	24	M14	2.5	A4 s/s
P0335.160-A4	17	28	M16	2.5	A4 s/s
P0335.180-A4	19	30	M18	2.5	A4 s/s
P0335.200-A4	21	34	M20	3.0	A4 s/s



P0335.ZP



Material
Steel, zinc plated.

Technical Notes
To DIN 433.

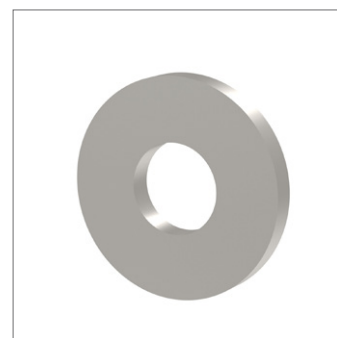
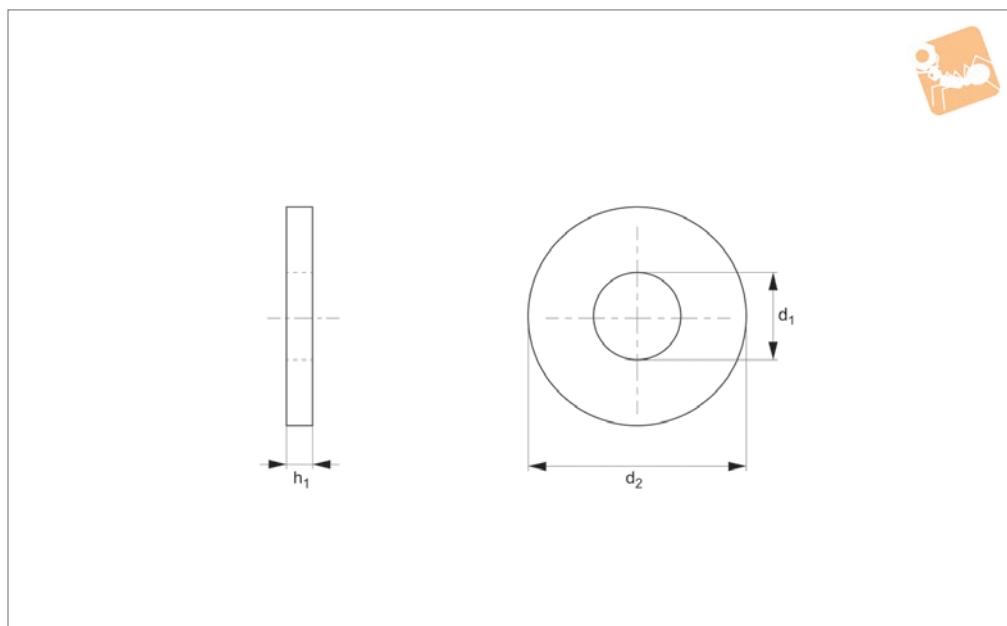
Order No.	d_1	d_2	For thread	h_1	Material
P0335.014-ZP	1.5	3	M1,4	0.3	Steel ZP
P0335.016-ZP	1.7	3.5	M1,6	0.3	Steel ZP
P0335.020-ZP	2.2	4.5	M 2	0.3	Steel ZP
P0335.025-ZP	2.7	5	M2,5	0.5	Steel ZP
P0335.030-ZP	3.2	6	M 3	0.5	Steel ZP
P0335.035-ZP	3.7	7	M3,5	0.5	Steel ZP
P0335.040-ZP	4.3	8	M 4	0.5	Steel ZP
P0335.050-ZP	5.3	9	M 5	1.0	Steel ZP
P0335.060-ZP	6.4	11	M 6	1.6	Steel ZP
P0335.080-ZP	8.4	15	M 8	1.6	Steel ZP
P0335.100-ZP	10.5	18	M10	1.6	Steel ZP
P0335.120-ZP	13	20	M12	2.0	Steel ZP
P0335.140-ZP	15	24	M14	2.5	Steel ZP
P0335.160-ZP	17	28	M16	2.5	Steel ZP
P0335.180-ZP	19	30	M18	2.5	Steel ZP
P0335.200-ZP	21	34	M20	3.0	Steel ZP



Heavy Flat Washers

Heavy - A2 stainless

Flat Washers



P0336.A2

FLAT WASHERS

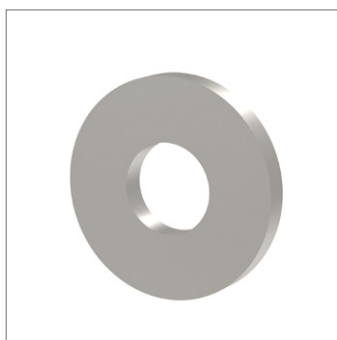
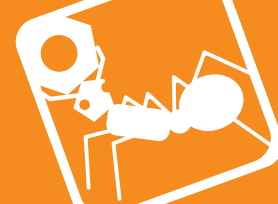
Material

Stainless steel (A2).

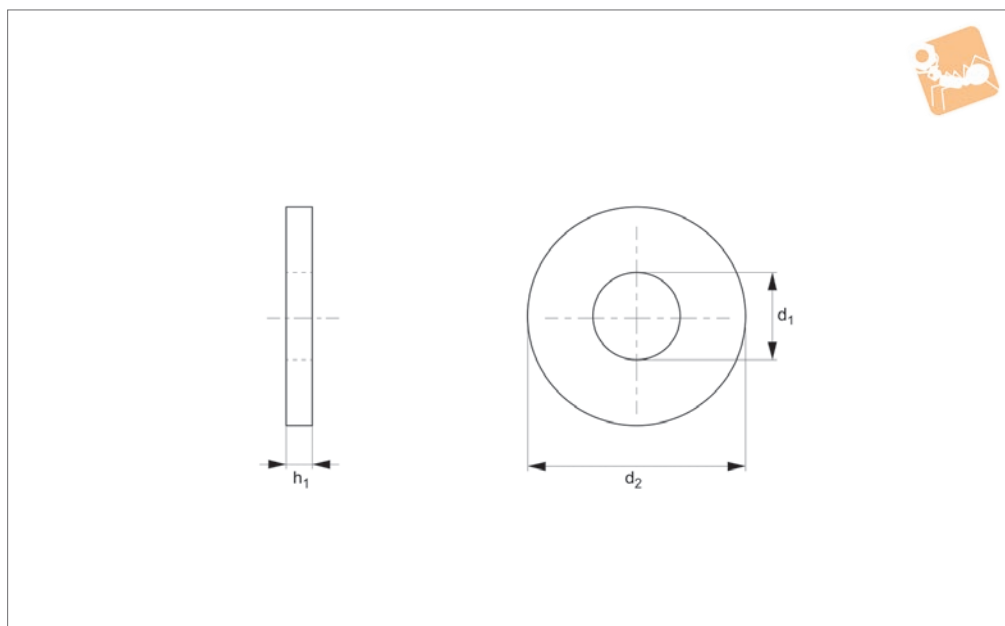
Technical Notes

To DIN 7349.

Order No.	d ₁	d ₂	For thread	h	Material
P0336.030-A2	3.2	9	M 3	1.0	A2 s/s
P0336.040-A2	4.3	12	M 4	1.6	A2 s/s
P0336.050-A2	5.3	15	M 5	2.0	A2 s/s
P0336.060-A2	6.4	17	M 6	3.0	A2 s/s
P0336.080-A2	8.4	21	M 8	4.0	A2 s/s
P0336.100-A2	10.5	25	M10	4.0	A2 s/s
P0336.120-A2	13.0	30	M12	6.0	A2 s/s
P0336.140-A2	15.0	36	M14	6.0	A2 s/s
P0336.160-A2	17.0	40	M16	6.0	A2 s/s
P0336.180-A2	19.0	44	M18	8.0	A2 s/s
P0336.200-A2	21.0	44	M20	8.0	A2 s/s
P0336.220-A2	23.0	50	M22	8.0	A2 s/s
P0336.240-A2	25.0	50	M24	10.0	A2 s/s
P0336.270-A2	28.0	60	M27	10.0	A2 s/s
P0336.300-A2	31.0	68	M30	10.0	A2 s/s



P0336.A4



Material

Stainless steel (A4).

Technical Notes

To DIN 7349.

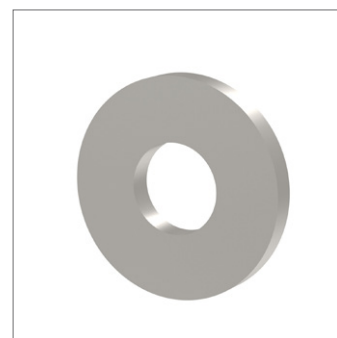
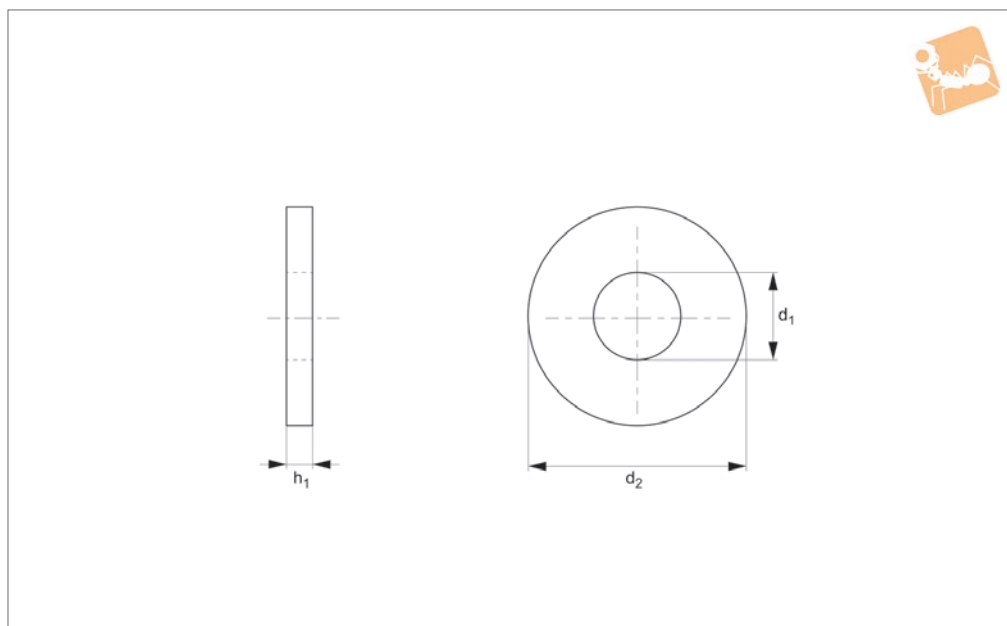
Order No.	d ₁	d ₂	For thread	h	Material
P0336.030-A4	3.2	9	M 3	1.0	A4 s/s
P0336.040-A4	4.3	12	M 4	1.6	A4 s/s
P0336.050-A4	5.3	15	M 5	2.0	A4 s/s
P0336.060-A4	6.4	17	M 6	3.0	A4 s/s
P0336.080-A4	8.4	21	M 8	4.0	A4 s/s
P0336.100-A4	10.5	25	M10	4.0	A4 s/s
P0336.120-A4	13.0	30	M12	6.0	A4 s/s
P0336.140-A4	15.0	36	M14	6.0	A4 s/s
P0336.160-A4	17.0	40	M16	6.0	A4 s/s
P0336.180-A4	19.0	44	M18	8.0	A4 s/s
P0336.200-A4	21.0	44	M20	8.0	A4 s/s
P0336.220-A4	23.0	50	M22	8.0	A4 s/s
P0336.240-A4	25.0	50	M24	10.0	A4 s/s
P0336.270-A4	28.0	60	M27	10.0	A4 s/s
P0336.300-A4	31.0	68	M30	10.0	A4 s/s



Heavy Flat Washers

Heavy - steel, zinc-plated

Flat Washers



P0336.ZP

FLAT WASHERS

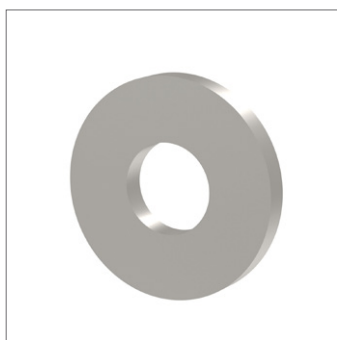
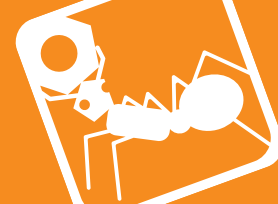
Material

Steel, zinc-plated.

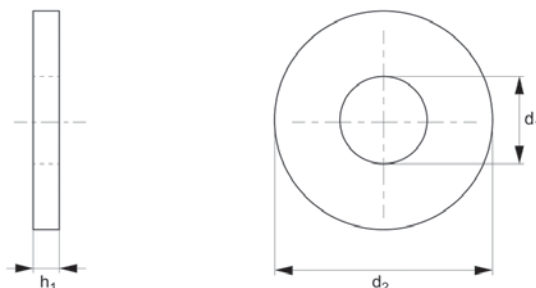
Technical Notes

To DIN 7349.

Order No.	d_1	d_2	For thread	h	Material
P0336.030-ZP	3.2	9	M 3	1.0	Steel ZP
P0336.040-ZP	4.3	12	M 4	1.6	Steel ZP
P0336.050-ZP	5.3	15	M 5	2.0	Steel ZP
P0336.060-ZP	6.4	17	M 6	3.0	Steel ZP
P0336.080-ZP	8.4	21	M 8	4.0	Steel ZP
P0336.100-ZP	10.5	25	M10	4.0	Steel ZP
P0336.120-ZP	13.0	30	M12	6.0	Steel ZP
P0336.140-ZP	15.0	36	M14	6.0	Steel ZP
P0336.160-ZP	17.0	40	M16	6.0	Steel ZP
P0336.180-ZP	19.0	44	M18	8.0	Steel ZP
P0336.200-ZP	21.0	44	M20	8.0	Steel ZP
P0336.220-ZP	23.0	50	M22	8.0	Steel ZP
P0336.240-ZP	25.0	50	M24	10.0	Steel ZP
P0336.270-ZP	28.0	60	M27	10.0	Steel ZP
P0336.300-ZP	31.0	68	M30	10.0	Steel ZP



P0336.SC



Material
Steel, self-colour.

Technical Notes
To DIN 7349.

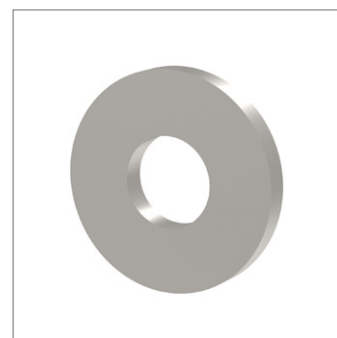
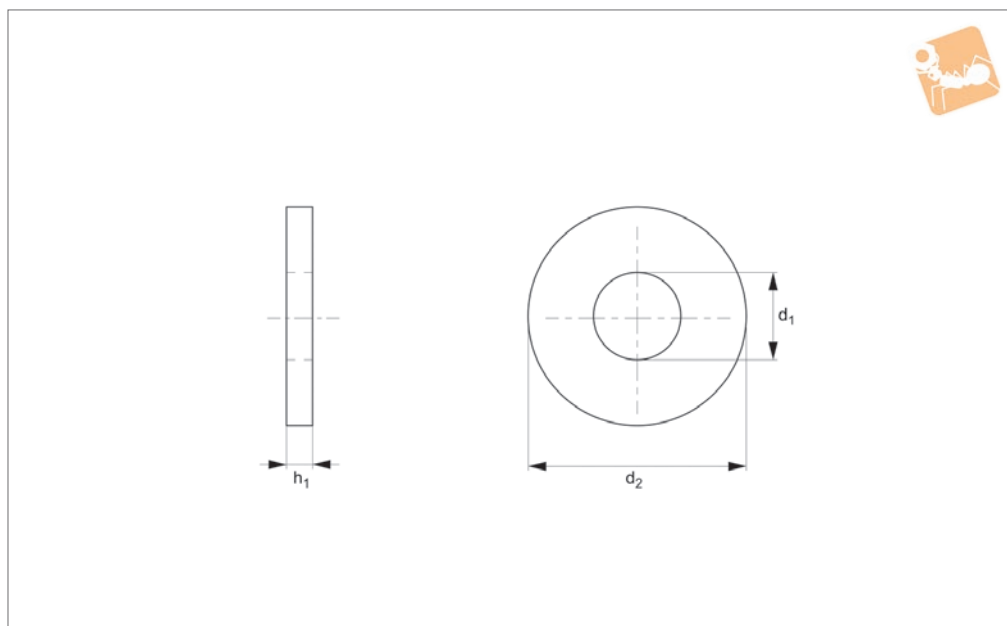
Order No.	d ₁	d ₂	For thread	h	Material
P0336.030-SC	3.2	9	M 3	1.0	Steel SC
P0336.040-SC	4.3	12	M 4	1.6	Steel SC
P0336.050-SC	5.3	15	M 5	2.0	Steel SC
P0336.060-SC	6.4	17	M 6	3.0	Steel SC
P0336.080-SC	8.4	21	M 8	4.0	Steel SC
P0336.100-SC	10.5	25	M10	4.0	Steel SC
P0336.120-SC	13.0	30	M12	6.0	Steel SC
P0336.140-SC	15.0	36	M14	6.0	Steel SC
P0336.160-SC	17.0	40	M16	6.0	Steel SC
P0336.180-SC	19.0	44	M18	8.0	Steel SC
P0336.200-SC	21.0	44	M20	8.0	Steel SC
P0336.220-SC	23.0	50	M22	8.0	Steel SC
P0336.240-SC	25.0	50	M24	10.0	Steel SC
P0336.270-SC	28.0	60	M27	10.0	Steel SC
P0336.300-SC	31.0	68	M30	10.0	Steel SC



Large Diameter Washers

Large diameter - A2 stainless

Flat Washers



P0337.A2

FLAT WASHERS

Material

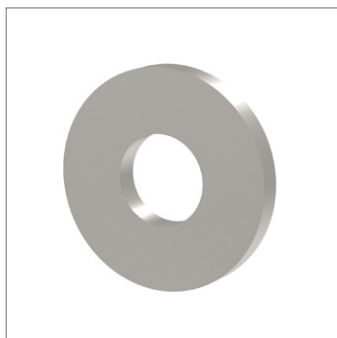
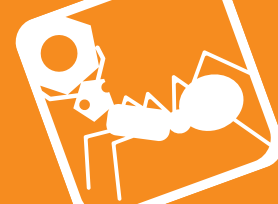
Stainless steel (A2).

Technical Notes

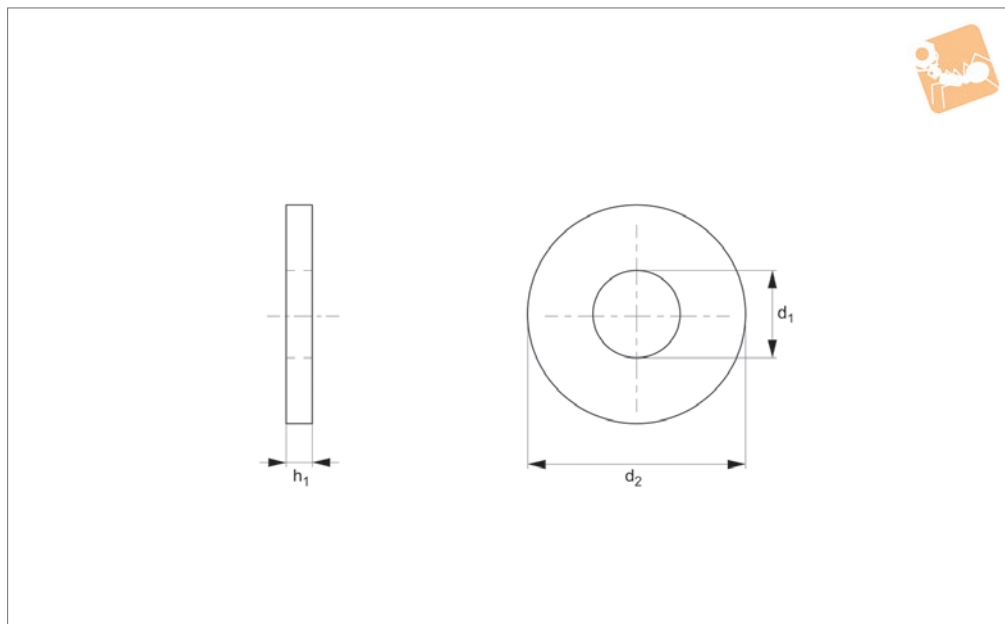
To DIN 9021, ISO 7093.

Order No.	For thread	d ₁	d ₂	h ₁	Material
P0337.020-A2	M 2	2.2	6	0.8	A2 s/s
P0337.025-A2	M2,5	2.7	8	0.8	A2 s/s
P0337.030-A2	M 3	3.2	9	0.8	A2 s/s
P0337.035-A2	M3,5	3.7	11	0.8	A2 s/s
P0337.040-A2	M 4	4.3	12	1.0	A2 s/s
P0337.050-A2	M 5	5.3	15	1.2	A2 s/s
P0337.060-A2	M 6	6.4	18	1.6	A2 s/s
P0337.070-A2	M 7	7.4	22	2.0	A2 s/s
P0337.080-A2	M 8	8.4	24	2.0	A2 s/s
P0337.100-A2	M10	10.5	30	2.5	A2 s/s
P0337.120-A2	M12	13.0	37	3.0	A2 s/s
P0337.140-A2	M14	15.0	44	3.0	A2 s/s
P0337.160-A2	M16	17.0	50	3.0	A2 s/s
P0337.180-A2	M18	20.0	56	4.0	A2 s/s
P0337.200-A2	M20	22.0	60	4.0	A2 s/s
P0337.240-A2	M24	26.0	72	5.0	A2 s/s
P0337.300-A2	M30	33.0	92	6.0	A2 s/s
P0337.360-A2	M36	39.0	110	8.0	A2 s/s





P0337.A4



Material

Stainless steel (A4).

Technical Notes

To DIN 9021, ISO 7093.

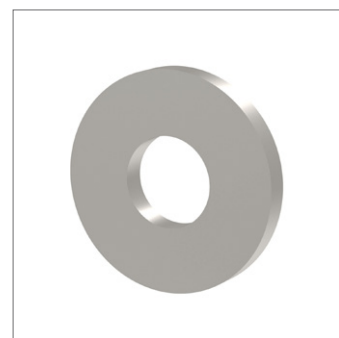
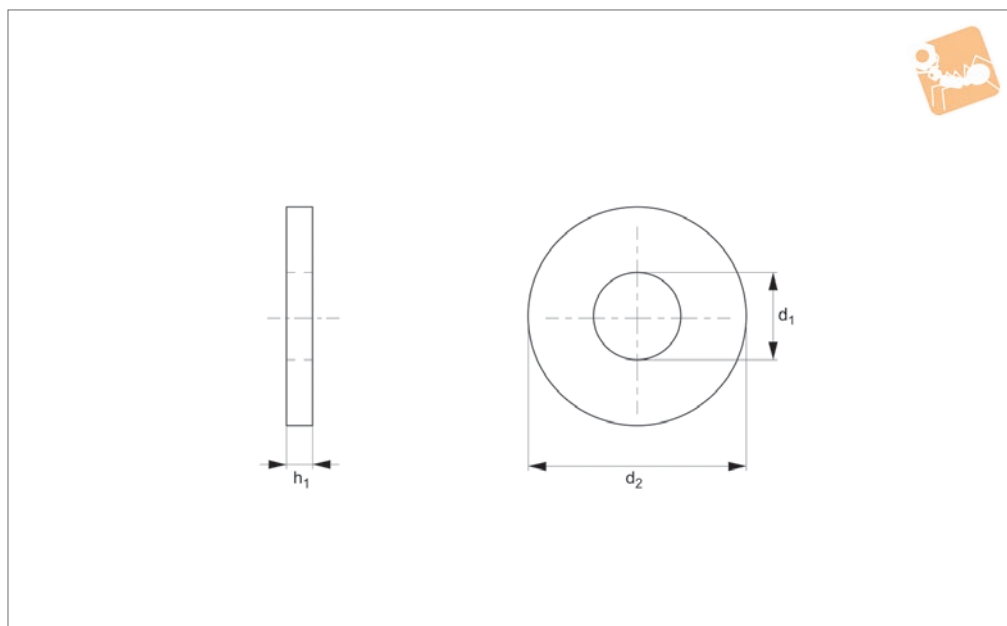
Order No.	For thread	d ₁	d ₂	h ₁	Material
P0337.020-A4	M 2	2.2	6	0.8	A4 s/s
P0337.025-A4	M2,5	2.7	8	0.8	A4 s/s
P0337.030-A4	M 3	3.2	9	0.8	A4 s/s
P0337.035-A4	M3,5	3.7	11	0.8	A4 s/s
P0337.040-A4	M 4	4.3	12	1.0	A4 s/s
P0337.050-A4	M 5	5.3	15	1.2	A4 s/s
P0337.060-A4	M 6	6.4	18	1.6	A4 s/s
P0337.070-A4	M 7	7.4	22	2.0	A4 s/s
P0337.080-A4	M 8	8.4	24	2.0	A4 s/s
P0337.100-A4	M10	10.5	30	2.5	A4 s/s
P0337.120-A4	M12	13.0	37	3.0	A4 s/s
P0337.140-A4	M14	15.0	44	3.0	A4 s/s
P0337.160-A4	M16	17.0	50	3.0	A4 s/s
P0337.180-A4	M18	20.0	56	4.0	A4 s/s
P0337.200-A4	M20	22.0	60	4.0	A4 s/s
P0337.240-A4	M24	26.0	72	5.0	A4 s/s
P0337.300-A4	M30	33.0	92	6.0	A4 s/s
P0337.360-A4	M36	39.0	110	8.0	A4 s/s



Large Diameter Washers

Large Diameter- Brass

Flat Washers



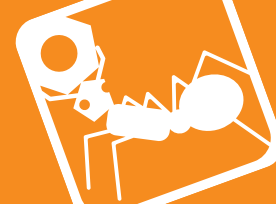
P0337.BR

FLAT WASHERS

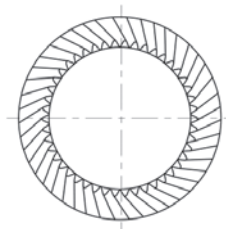
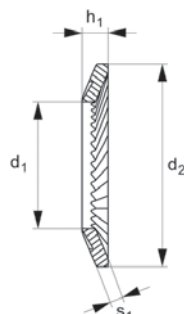
Material
Brass.

Technical Notes
To DIN 9021, ISO 7093.

Order No.	For thread	d_1	d_2	h_1	Material
P0337.030-BR	M 3	3.2	9	0.8	Brass
P0337.040-BR	M 4	4.3	12	1.0	Brass
P0337.050-BR	M 5	5.3	15	1.2	Brass
P0337.060-BR	M 6	6.4	18	1.6	Brass
P0337.080-BR	M 8	8.4	24	2.0	Brass
P0337.100-BR	M10	10.5	30	2.5	Brass
P0337.120-BR	M12	13.0	37	3.0	Brass
P0337.140-BR	M14	15.0	44	3.0	Brass
P0337.160-BR	M16	17.0	50	3.0	Brass
P0337.200-BR	M20	22.0	60	4.0	Brass



P0363.A2



Material

Stainless steel (A2).

Technical Notes

To DIN 17222. Can be used with screws of class 8 and 8.8

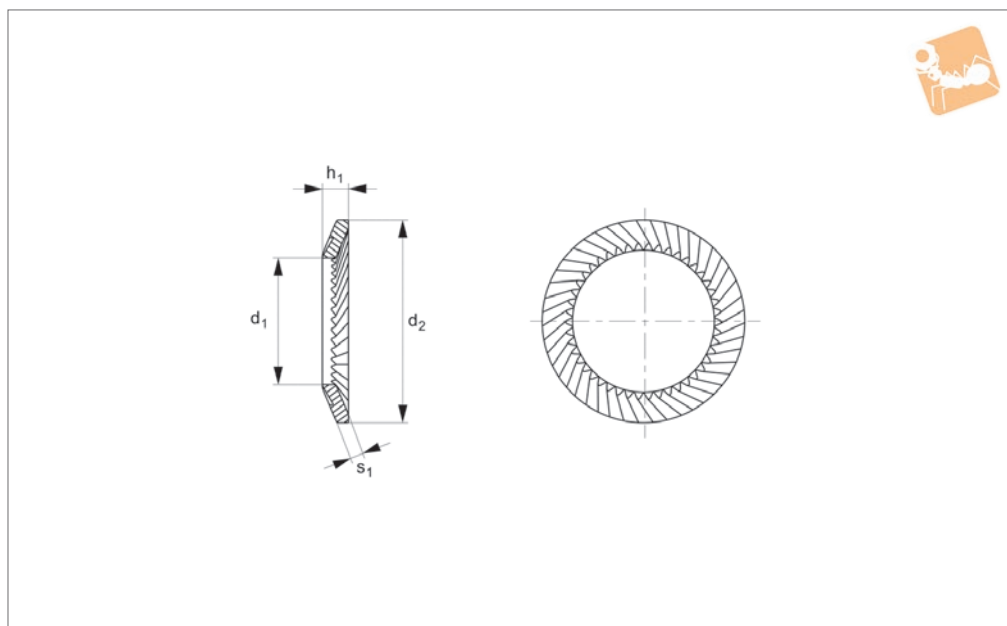
Order No.	For thread	d ₁	d ₂	h ₁	s ₁	Material
P0363.025-A2	M2,5	2.7	4.8	0.90	0.45	A2 s/s
P0363.030-A2	M 3	3.2	5.5	0.85	0.45	A2 s/s
P0363.040-A2	M 4	4.3	7.0	0.95	0.50	A2 s/s
P0363.050-A2	M 5	5.3	9.0	1.05	0.60	A2 s/s
P0363.060-A2	M 6	6.4	10.0	1.20	0.70	A2 s/s
P0363.080-A2	M 8	8.4	13.0	1.40	0.80	A2 s/s
P0363.100-A2	M10	10.5	16.0	1.60	1.00	A2 s/s
P0363.120-A2	M12	13.0	18.0	1.70	1.00	A2 s/s
P0363.140-A2	M14	15.0	21.0	2.00	1.20	A2 s/s
P0363.160-A2	M16	17.0	24.0	2.10	1.20	A2 s/s
P0363.200-A2	M20	21.0	30.0	2.50	1.40	A2 s/s
P0363.240-A2	M24	26.0	36.0	2.90	1.60	A2 s/s
P0363.300-A2	M30	32.0	45.0	3.60	2.00	A2 s/s



Schnorr Safety Washers

Steel, self-coloured

Flat Washers



P0363.SC

FLAT WASHERS

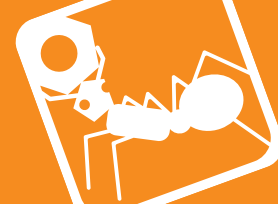
Material

Steel, self-coloured.

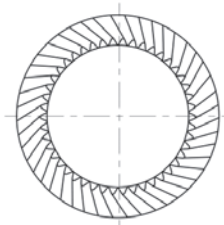
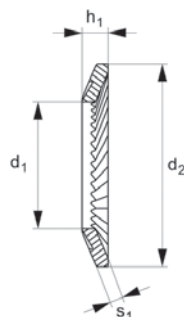
Technical Notes

To DIN 17222. Can be used with screws of class 8 and 8.8

Order No.	For thread	d ₁	d ₂	h	Material
P0363.030-SC	M 3	3.2	5.5	0.9	Steel SC
P0363.040-SC	M 4	4.3	7.0	1.0	Steel SC
P0363.050-SC	M 5	5.3	9.0	1.1	Steel SC
P0363.060-SC	M 6	6.4	10.0	1.2	Steel SC
P0363.080-SC	M 8	8.4	13.0	1.4	Steel SC
P0363.100-SC	M10	10.5	16.0	1.6	Steel SC
P0363.120-SC	M12	13.0	18.0	1.7	Steel SC
P0363.140-SC	M14	15.0	22.0	2.0	Steel SC
P0363.160-SC	M16	17.0	24.0	2.1	Steel SC
P0363.180-SC	M18	19.0	27.0	2.3	Steel SC
P0363.200-SC	M20	21.0	30.0	2.5	Steel SC
P0363.220-SC	M22	23.0	33.0	2.7	Steel SC
P0363.240-SC	M24	26.0	36.0	2.9	Steel SC
P0363.270-SC	M27	29.0	39.0	3.1	Steel SC
P0363.300-SC	M30	32.0	45.0	3.6	Steel SC



P0363.GV



Material

Steel, galvanised.

Technical Notes

To DIN 17222. Can be used with screws of class 8 and 8.8

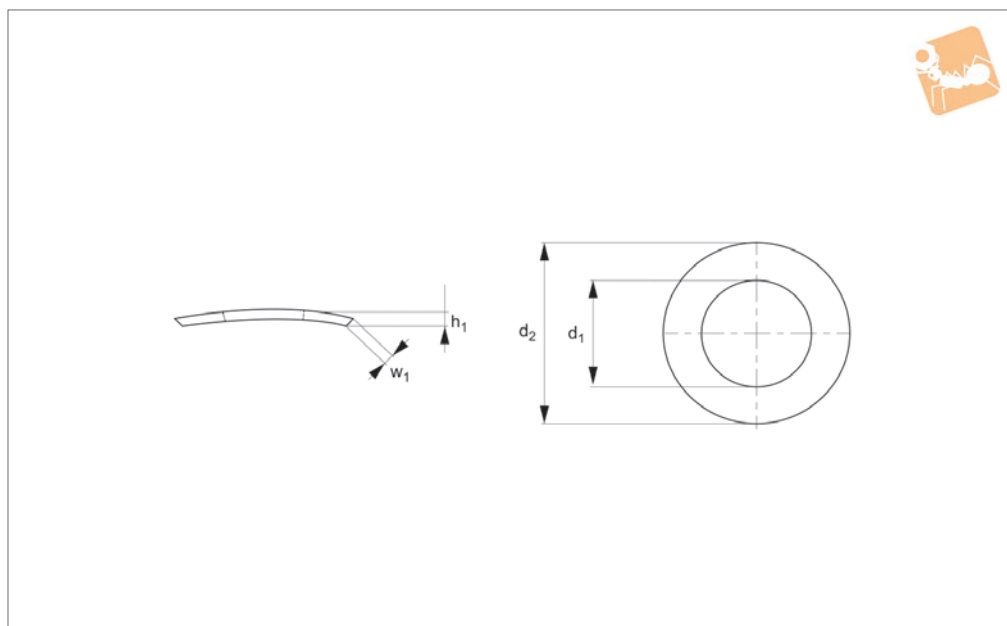
Order No.	For thread	d ₁	d ₂	h ₁	s ₁	Material
P0363.030-GV	M 3	3.2	5.5	0.85	0.45	Steel GV
P0363.040-GV	M 4	4.3	7.0	0.95	0.50	Steel GV
P0363.050-GV	M 5	5.3	9.0	1.05	0.60	Steel GV
P0363.060-GV	M 6	6.4	10.0	1.20	0.70	Steel GV
P0363.080-GV	M 8	8.4	13.0	1.40	0.80	Steel GV
P0363.100-GV	M10	10.5	16.0	1.60	1.00	Steel GV
P0363.120-GV	M12	13.0	18.0	1.70	1.00	Steel GV
P0363.140-GV	M14	15.0	21.0	2.00	1.20	Steel GV
P0363.160-GV	M16	17.0	24.0	2.10	1.20	Steel GV
P0363.180-GV	M18	19.0	27.0	2.30	1.40	Steel GV
P0363.200-GV	M20	21.0	30.0	2.50	1.40	Steel GV
P0363.220-GV	M22	23.0	33.0	2.70	1.40	Steel GV
P0363.240-GV	M24	25.6	36.0	2.90	1.60	Steel GV
P0363.270-GV	M27	28.6	39.0	3.10	2.00	Steel GV
P0363.300-GV	M30	31.6	45.0	3.60	2.00	Steel GV



Curved Spring Washers

A2 stainless

Flat Washers



P0360.A2

FLAT WASHERS

Material

Stainless steel (A2, AISI 303).

loads.

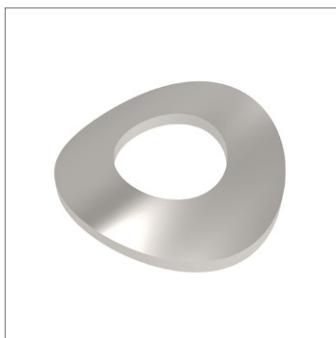
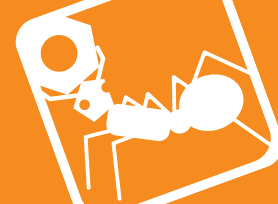
Use with fasteners >5.8 class.

Technical Notes

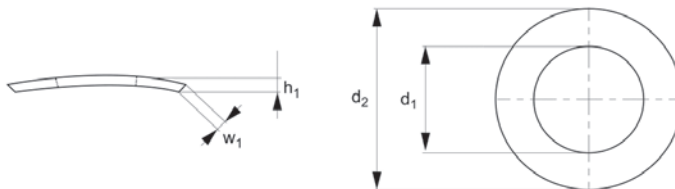
To DIN 137 A. Not for use under dynamic

Order No.	For thread	d ₁	d ₂	w ₁	h ₁ min.	Material
P0360.012-A2	M1,2	1.3	3.0	0.2	0.7	A2 s/s
P0360.014-A2	M1,4	1.5	3.0	0.25	0.7	A2 s/s
P0360.017-A2	M1,7	1.8	4.0	0.25	0.9	A2 s/s
P0360.020-A2	M 2	2.2	4.5	0.3	1.0	A2 s/s
P0360.025-A2	M2,5	2.8	5.5	0.3	1.1	A2 s/s
P0360.026-A2	M2,6	2.8	5.5	0.3	1.1	A2 s/s
P0360.030-A2	M 3	3.2	6	0.4	1.3	A2 s/s
P0360.035-A2	M3,5	3.7	7	0.4	1.3	A2 s/s
P0360.040-A2	M 4	4.3	8	0.5	1.6	A2 s/s
P0360.050-A2	M 5	5.3	10	0.5	1.8	A2 s/s
P0360.060-A2	M 6	6.4	11	0.5	2.2	A2 s/s
P0360.070-A2	M 7	7.4	12	0.5	2.4	A2 s/s
P0360.080-A2	M 8	8.4	15	0.5	3.4	A2 s/s
P0360.100-A2	M10	10.5	18	0.8	4.0	A2 s/s





P0360.ZP



Material

Spring steel, zinc-plated.

loads.

Use with fasteners >5.8 class.

Technical Notes

To DIN 137 A. Not for use under dynamic

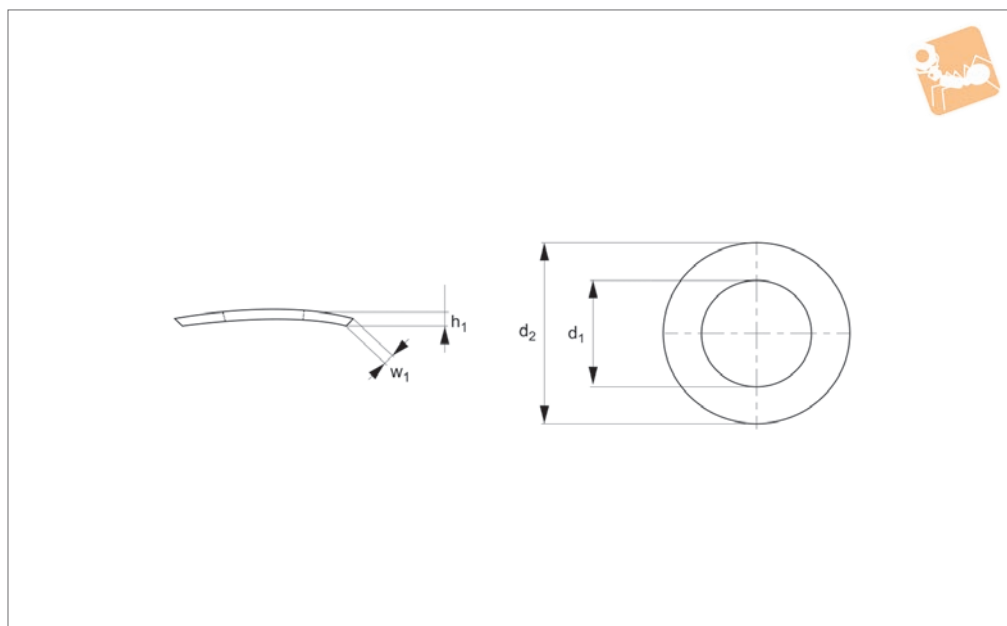
Order No.	For thread	d ₁	d ₂	w ₁	h ₁ min.	Material
P0360.020-ZP	M 2	2.2	4.5	0.3	1.0	Steel ZP
P0360.025-ZP	M2,5	2.8	5.5	0.3	1.1	Steel ZP
P0360.030-ZP	M 3	3.2	6	0.4	1.3	Steel ZP
P0360.035-ZP	M3,5	3.7	7	0.4	1.3	Steel ZP
P0360.040-ZP	M 4	4.3	8	0.5	1.6	Steel ZP
P0360.050-ZP	M 5	5.3	10	0.5	1.8	Steel ZP
P0360.060-ZP	M 6	6.4	11	0.5	2.2	Steel ZP
P0360.070-ZP	M 7	7.4	12	0.5	2.4	Steel ZP
P0360.080-ZP	M 8	8.4	15	0.5	3.4	Steel ZP
P0360.100-ZP	M10	10.5	18	0.8	4.0	Steel ZP



Curved Spring Washers

Steel, self-coloured

Flat Washers



P0360.SC

FLAT WASHERS

Material

Spring steel, self-colour.

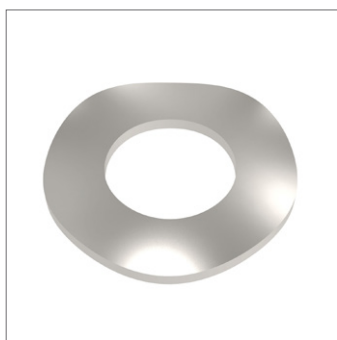
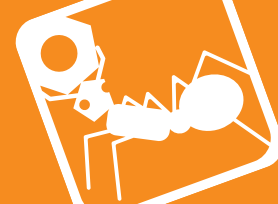
loads.

Use with fasteners >5.8 class.

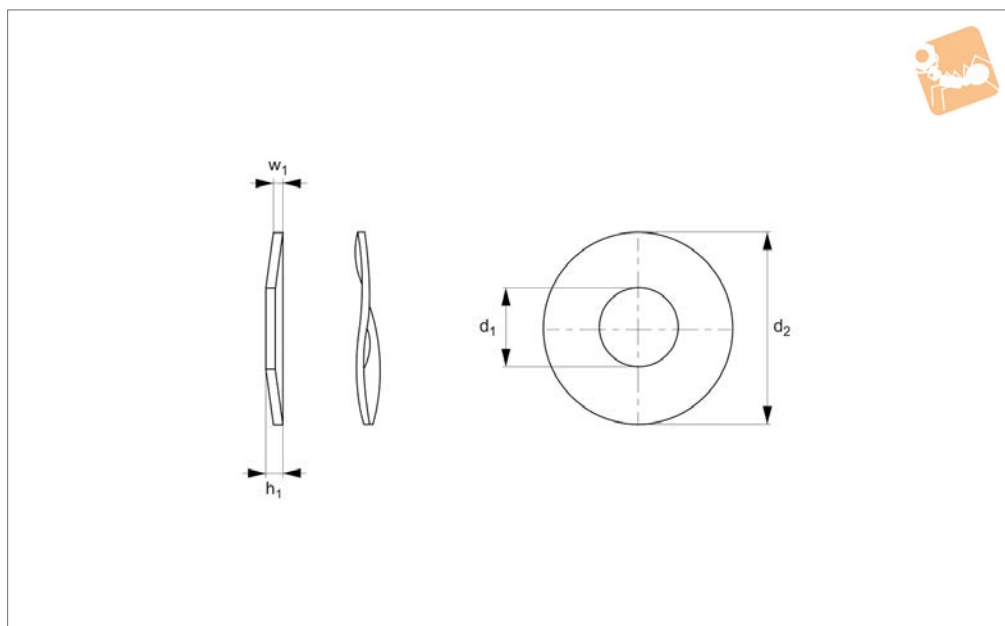
Technical Notes

To DIN 137 A. Not for use under dynamic

Order No.	For thread	d_1	d_2	w_1	h_1 min.	Material
P0360.020-SC	M 2	2.2	4.5	0.3	1.0	Steel SC
P0360.025-SC	M2,5	2.8	5.5	0.3	1.1	Steel SC
P0360.030-SC	M 3	3.2	6	0.4	1.3	Steel SC
P0360.035-SC	M3,5	3.7	7	0.4	1.3	Steel SC
P0360.040-SC	M 4	4.3	8	0.5	1.6	Steel SC
P0360.050-SC	M 5	5.3	10	0.5	1.8	Steel SC
P0360.060-SC	M 6	6.4	11	0.5	2.2	Steel SC
P0360.070-SC	M 7	7.4	12	0.5	2.4	Steel SC
P0360.080-SC	M 8	8.4	15	0.5	3.4	Steel SC
P0360.100-SC	M10	10.5	18	0.8	4.0	Steel SC



P0361.A2



Material

Stainless steel (A2, AISI 303).

Technical Notes

To DIN 137 B.

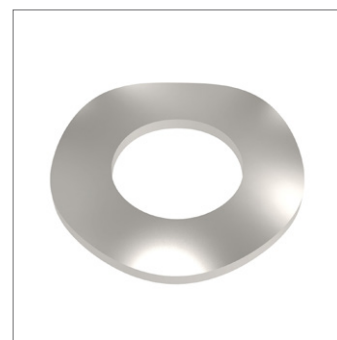
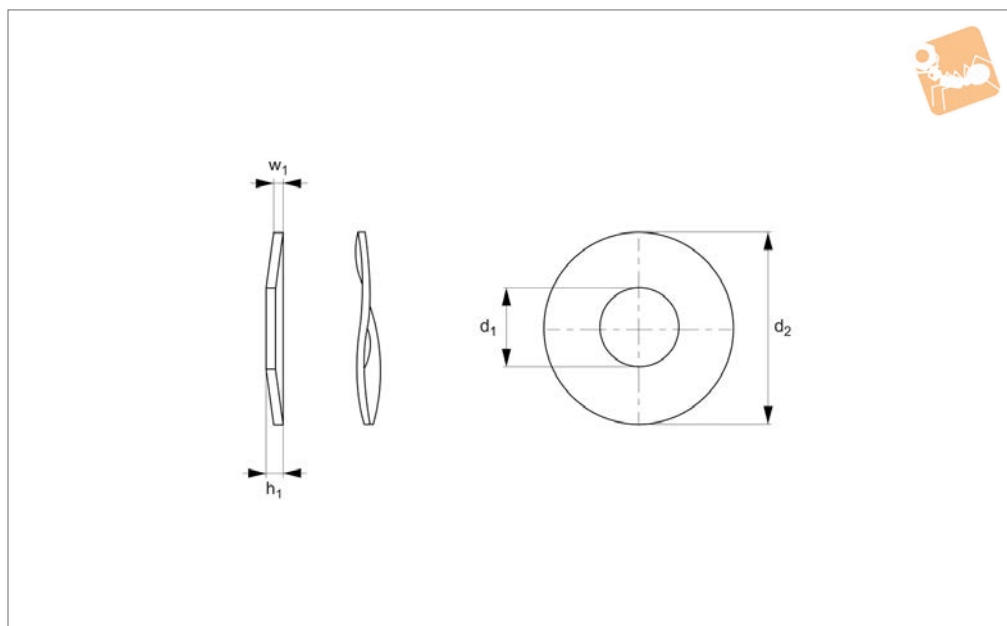
Order No.	For thread	d ₁	d ₂	w ₁	h ₁ max.	Material
P0361.030-A2	M 3	3.2	8	0.5	1.6	A2 s/s
P0361.035-A2	M3,5	3.7	8	0.5	1.8	A2 s/s
P0361.040-A2	M 4	4.3	9	0.5	2.0	A2 s/s
P0361.050-A2	M 5	5.3	11	0.5	2.2	A2 s/s
P0361.060-A2	M 6	6.4	12	0.5	2.6	A2 s/s
P0361.070-A2	M 7	7.4	14	0.8	3.0	A2 s/s
P0361.080-A2	M 8	8.4	15	0.8	3.0	A2 s/s
P0361.100-A2	M10	10.5	21	1.0	4.2	A2 s/s
P0361.120-A2	M12	13	24	1.2	5.0	A2 s/s
P0361.140-A2	M14	15	28	1.6	6.0	A2 s/s
P0361.160-A2	M16	17	30	1.6	6.4	A2 s/s
P0361.180-A2	M18	19	34	1.6	6.6	A2 s/s
P0361.200-A2	M20	21	36	1.6	7.4	A2 s/s
P0361.220-A2	M22	23	40	1.8	7.8	A2 s/s
P0361.240-A2	M24	25	44	1.8	8.2	A2 s/s



Wave Spring Washers

A4 stainless

Flat Washers



P0361.A4

FLAT WASHERS

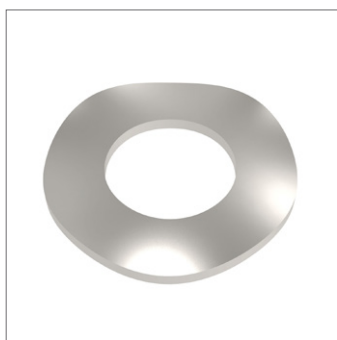
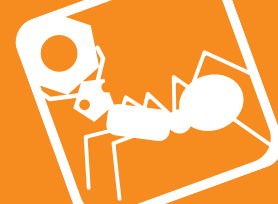
Material

Stainless steel (A4, AISI 316).

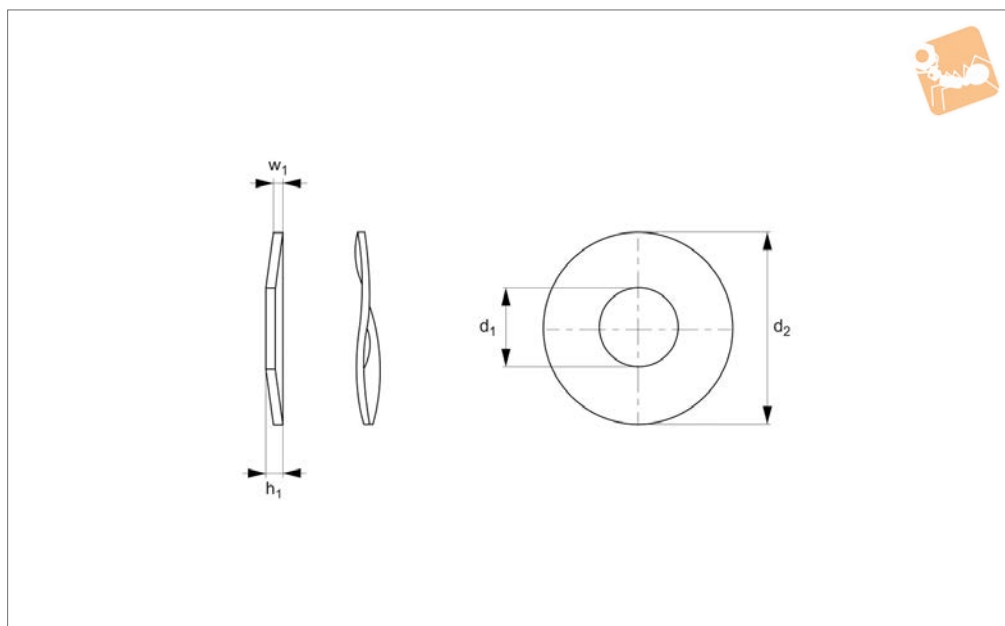
Technical Notes

To DIN 137 B.

Order No.	For thread	d ₁	d ₂	w ₁	h ₁ max.	Material
P0361.030-A4	M 3	3.2	8	0.5	1.6	A4 s/s
P0361.035-A4	M3,5	3.7	8	0.5	1.8	A4 s/s
P0361.040-A4	M 4	4.3	9	0.5	2.0	A4 s/s
P0361.050-A4	M 5	5.3	11	0.5	2.2	A4 s/s
P0361.060-A4	M 6	6.4	12	0.5	2.6	A4 s/s
P0361.070-A4	M 7	7.4	14	0.8	3.0	A4 s/s
P0361.080-A4	M 8	8.4	15	0.8	3.0	A4 s/s
P0361.100-A4	M10	10.5	21	1.0	4.2	A4 s/s
P0361.120-A4	M12	13	24	1.2	5.0	A4 s/s
P0361.140-A4	M14	15	28	1.6	6.0	A4 s/s
P0361.160-A4	M16	17	30	1.6	6.4	A4 s/s
P0361.180-A4	M18	19	34	1.6	6.6	A4 s/s
P0361.200-A4	M20	21	36	1.6	7.4	A4 s/s
P0361.220-A4	M22	23	40	1.8	7.8	A4 s/s
P0361.240-A4	M24	25	44	1.8	8.2	A4 s/s



P0361.ZP



Material

Steel, zinc-plated.

Technical Notes

To DIN 137 B.

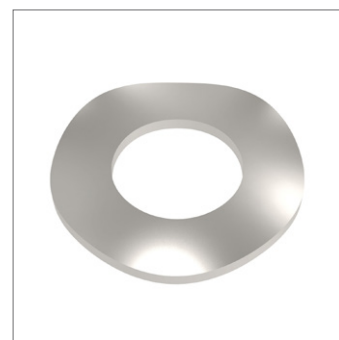
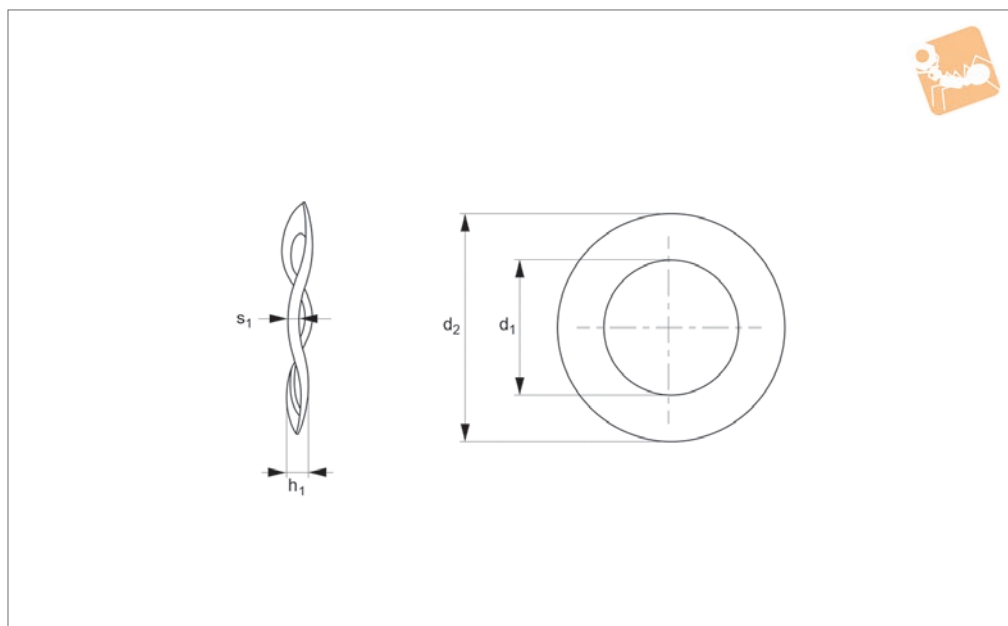
Order No.	For thread	d ₁	d ₂	w ₁	h ₁ max.	Material
P0361.030-ZP	M 3	3.2	8	0.5	1.6	Steel SC
P0361.040-ZP	M 4	4.3	9	0.5	2.0	Steel SC
P0361.050-ZP	M 5	5.3	11	0.5	2.2	Steel SC
P0361.060-ZP	M 6	6.4	12	0.5	2.6	Steel SC
P0361.070-ZP	M 7	7.4	14	0.8	3.0	Steel SC
P0361.080-ZP	M 8	8.4	15	0.8	3.0	Steel SC
P0361.100-ZP	M10	10.5	21	1.0	4.2	Steel SC
P0361.120-ZP	M12	13	24	1.2	5.0	Steel SC
P0361.140-ZP	M14	15	28	1.6	6.0	Steel SC
P0361.160-ZP	M16	17	30	1.6	6.4	Steel SC



Crinkle Washers

A2 stainless

Flat Washers



P0368.A2

FLAT WASHERS

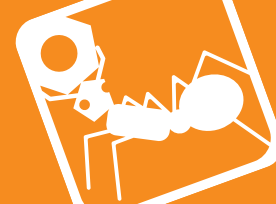
Material

Stainless steel (A2, AISI 303).

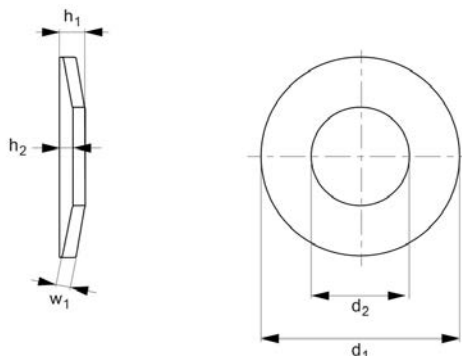
Technical Notes

To BS 4463.

Order No.	For thread	d ₁	d ₂	h ₁	s ₁	Material
P0368.016-A2	M1,6	1.7	3.7	0.51	0.16	A2 s/s
P0368.020-A2	M 2	2.2	4.6	0.53	0.16	A2 s/s
P0368.025-A2	M2,5	2.7	5.8	0.53	0.16	A2 s/s
P0368.030-A2	M 3	3.2	6.4	0.61	0.16	A2 s/s
P0368.035-A2	M3,5	3.7	6.9	0.79	0.20	A2 s/s
P0368.040-A2	M 4	4.3	8.1	0.84	0.28	A2 s/s
P0368.050-A2	M 5	5.3	9.2	0.89	0.30	A2 s/s
P0368.060-A2	M 6	6.4	11.5	1.14	0.40	A2 s/s
P0368.080-A2	M 8	8.4	15	1.4	0.40	A2 s/s
P0368.100-A2	M 10	10.5	19.6	1.7	0.55	A2 s/s
P0368.120-A2	M 12	13	22	1.9	0.55	A2 s/s
P0368.160-A2	M 16	17	27.8	2.41	0.70	A2 s/s
P0368.200-A2	M 20	21	34.7	2.66	0.70	A2 s/s



P0369.A2



Material

Stainless steel (DIN 1.4310).

Force F = spring force (N) at deflection of $0.75 \times h_2$ (ie 75% of stroke).
 h_2 is total stroke available.

Technical Notes

To DIN 2093. For general applications.

Order No.	d_1	d_2	w_1	h_1	h_2	F N
P0369.08-32-03-A2	8	3.2	0.3	0.55	0.25	96
P0369.08-32-04-A2	8	3.2	0.4	0.60	0.20	171
P0369.08-32-05-A2	8	3.2	0.5	0.70	0.20	329
P0369.08-42-02-A2	8	4.2	0.2	0.45	0.25	36
P0369.08-42-03-A2	8	4.2	0.3	0.55	0.25	109
P0369.08-42-04-A2	8	4.2	0.4	0.60	0.20	192
P0369.10-42-04-A2	10	4.2	0.4	0.70	0.30	174
P0369.10-42-05-A2	10	4.2	0.5	0.75	0.25	270
P0369.10-42-06-A2	10	4.2	0.6	0.85	0.25	462
P0369.10-52-04-A2	10	5.2	0.4	0.70	0.30	192
P0369.10-52-05-A2	10	5.2	0.5	0.75	0.25	299
P0369.12-42-04-A2	12	4.2	0.4	0.80	0.40	164
P0369.12-42-05-A2	12	4.2	0.5	0.90	0.40	305
P0369.12-42-06-A2	12	4.2	0.6	1.00	0.40	512
P0369.12-52-05-A2	12	5.2	0.5	0.90	0.40	321
P0369.12-52-06-A2	12	5.2	0.6	0.95	0.35	465
P0369.12-62-05-A2	12	6.2	0.5	0.85	0.35	300
P0369.12-62-06-A2	12	6.2	0.6	0.95	0.35	508
P0369.15-52-04-A2	15	5.2	0.4	0.95	0.55	162
P0369.15-52-05-A2	15	5.2	0.5	1.00	0.50	265
P0369.15-52-06-A2	15	5.2	0.6	1.05	0.45	374
P0369.15-52-07-A2	15	5.2	0.7	1.25	0.55	733
P0369.15-62-05-A2	15	6.2	0.5	1.00	0.50	266
P0369.15-62-06-A2	15	6.2	0.6	1.05	0.45	389
P0369.15-62-07-A2	15	6.2	0.7	1.10	0.40	532
P0369.15-82-07-A2	15	8.2	0.7	1.10	0.40	613
P0369.15-82-08-A2	15	8.2	0.8	1.20	0.40	903
P0369.16-82-04-A2	16	8.2	0.4	0.90	0.50	142
P0369.16-82-06-A2	16	8.2	0.6	1.05	0.45	377
P0369.18-62-04-A2	18	6.2	0.4	1.00	0.60	128
P0369.18-62-05-A2	18	6.2	0.5	1.10	0.60	225
P0369.18-62-06-A2	18	6.2	0.6	1.20	0.60	368
P0369.18-62-07-A2	18	6.2	0.7	1.40	0.70	683
P0369.18-62-08-A2	18	6.2	0.8	1.50	0.70	986



Disc Springs

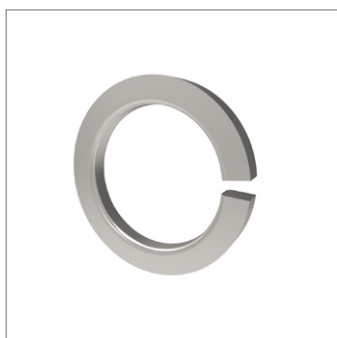
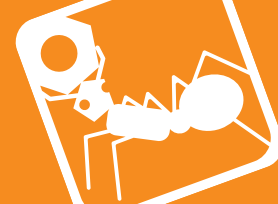
A2 stainless

Flat Washers

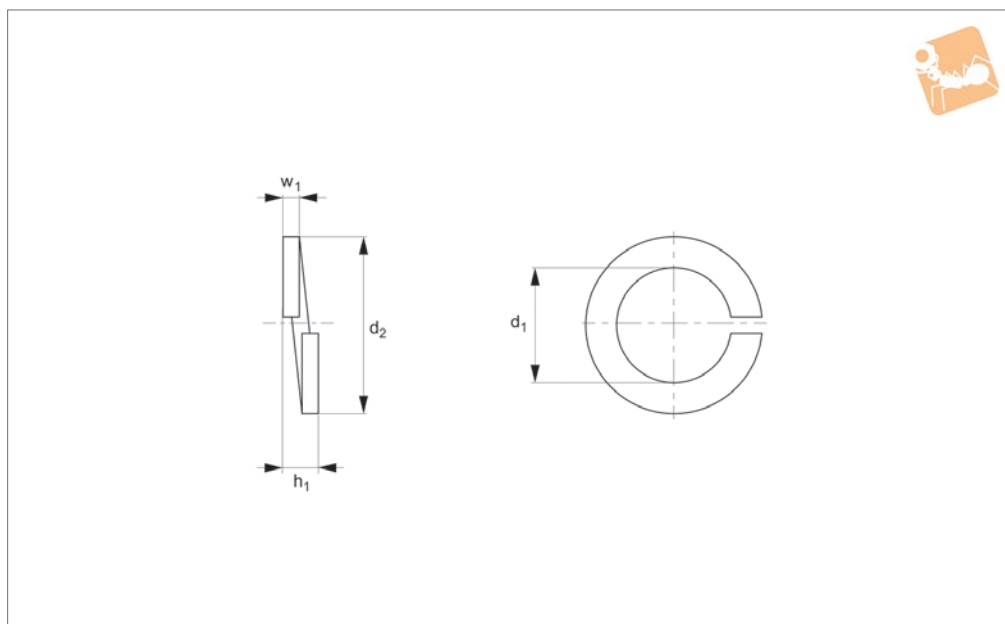


Order No.	d ₁	d ₂	w ₁	h ₁	h ₂	F N
P0369.18-82-07-A2	18	8.2	0.7	1.25	0.55	549
P0369.18-82-08-A2	18	8.2	0.8	1.30	0.50	720
P0369.18-82-10-A2	18	8.2	1.0	1.50	0.50	1377
P0369.18-92-07-A2	18	9.2	0.7	1.20	0.50	521
P0369.18-92-10-A2	18	9.2	1.0	1.40	0.40	1154
P0369.20-82-05-A2	20	8.2	0.5	1.15	0.65	212
P0369.20-82-06-A2	20	8.2	0.6	1.30	0.70	379
P0369.20-82-07-A2	20	8.2	0.7	1.35	0.65	523
P0369.20-82-08-A2	20	8.2	0.8	1.40	0.60	691
P0369.20-82-10-A2	20	8.2	1.0	1.60	0.60	967

FLAT WASHERS



P0370.A2



Material

Stainless steel (A2, AISI 303).

Technical Notes

To DIN 127 B.

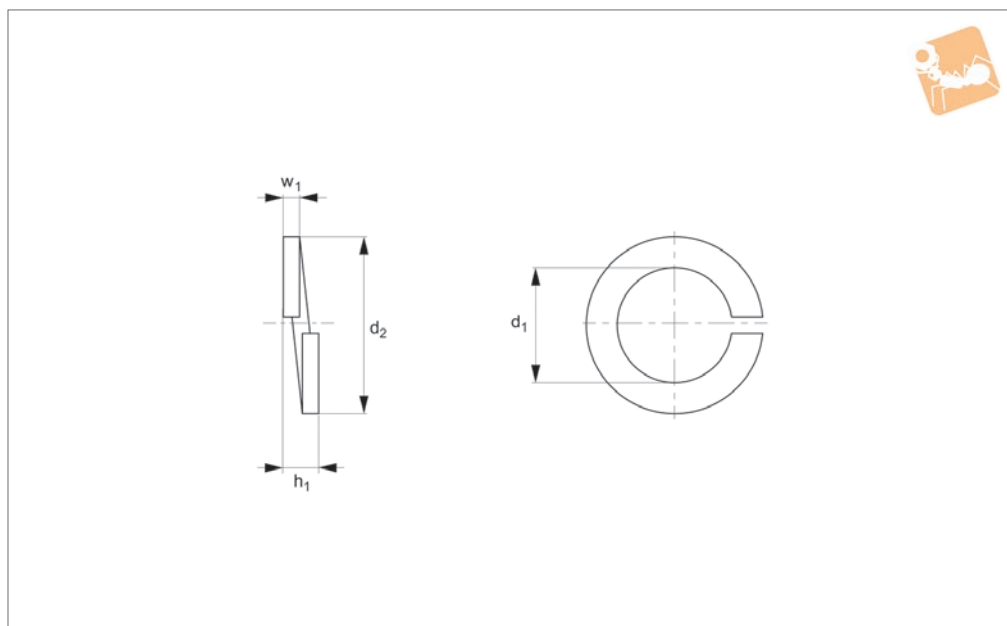
Order No.	For thread	d ₁	d ₂	h ₁ min.	w ₁	Material
P0370.020-A2	M 2	2.1	4.4	1.0	0.5	A2 s/s
P0370.025-A2	M2,5	2.6	5.1	1.2	0.6	A2 s/s
P0370.030-A2	M 3	3.1	5.2	1.6	0.8	A2 s/s
P0370.035-A2	M3,5	3.6	6.7	1.6	0.8	A2 s/s
P0370.040-A2	M 4	4.1	7.6	1.8	0.9	A2 s/s
P0370.050-A2	M 5	5.1	9.2	2.4	1.2	A2 s/s
P0370.060-A2	M 6	6.1	11.8	3.2	1.6	A2 s/s
P0370.080-A2	M 8	8.1	14.8	4.0	2.0	A2 s/s
P0370.100-A2	M10	10.2	18.1	4.4	2.2	A2 s/s
P0370.120-A2	M12	12.2	21.1	5.0	2.5	A2 s/s
P0370.140-A2	M14	14.2	24.1	6.0	3.0	A2 s/s
P0370.160-A2	M16	16.2	27.4	7.0	3.5	A2 s/s
P0370.180-A2	M18	18.2	29.4	7.0	3.5	A2 s/s
P0370.200-A2	M20	20.2	33.6	8.0	4.0	A2 s/s
P0370.220-A2	M22	22.5	35.9	8.0	4.0	A2 s/s
P0370.240-A2	M24	24.5	40.0	10.0	5.0	A2 s/s
P0370.270-A2	M27	27.5	43.0	10.0	6.0	A2 s/s
P0370.300-A2	M30	30.5	48.2	12.0	6.0	A2 s/s
P0370.360-A2	M36	36.5	58.2	12.0	6.0	A2 s/s
P0370.400-A2	M40	40.5	63.5	14.0	7.0	A2 s/s
P0370.420-A2	M42	42.5	68.2	14.0	7.0	A2 s/s
P0370.480-A2	M48	49.0	75.0	14.0	7.0	A2 s/s



Spring Washers Rectangular Section

A4 stainless

Flat Washers



P0370.A4

FLAT WASHERS

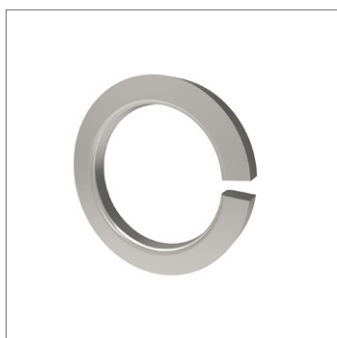
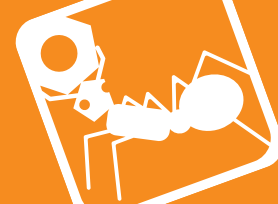
Material

Stainless steel (A4, AISI 316).

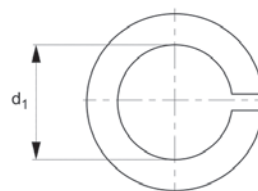
Technical Notes

To DIN 127 B.

Order No.	For thread	d ₁	d ₂	h ₁ min.	w ₁	Material
P0370.020-A4	M 2	2.1	4.4	1.0	0.5	A4 s/s
P0370.023-A4	M2,3	2.4	4.9	1.2	0.6	A4 s/s
P0370.025-A4	M2,5	2.6	5.1	1.2	0.6	A4 s/s
P0370.026-A4	M2,6	2.7	5.2	1.2	0.6	A4 s/s
P0370.030-A4	M 3	3.1	5.2	1.6	0.8	A4 s/s
P0370.035-A4	M3,5	3.6	6.7	1.6	0.8	A4 s/s
P0370.040-A4	M 4	4.1	7.6	1.8	0.9	A4 s/s
P0370.050-A4	M 5	5.1	9.2	2.4	1.2	A4 s/s
P0370.060-A4	M 6	6.1	11.8	3.2	1.6	A4 s/s
P0370.080-A4	M 8	8.1	14.8	4.0	2.0	A4 s/s
P0370.100-A4	M10	10.2	18.1	4.4	2.2	A4 s/s
P0370.120-A4	M12	12.2	21.1	5.0	2.5	A4 s/s
P0370.140-A4	M14	14.2	24.1	6.0	3.0	A4 s/s
P0370.160-A4	M16	16.2	27.4	7.0	3.5	A4 s/s
P0370.180-A4	M18	18.2	29.4	7.0	3.5	A4 s/s
P0370.200-A4	M20	20.2	33.6	8.0	4.0	A4 s/s
P0370.220-A4	M22	22.5	35.9	8.0	4.0	A4 s/s
P0370.240-A4	M24	24.5	40.0	10.0	5.0	A4 s/s
P0370.270-A4	M27	27.5	43.0	10.0	6.0	A4 s/s
P0370.300-A4	M30	30.5	48.2	12.0	6.0	A4 s/s
P0370.360-A4	M36	36.5	58.2	12.0	6.0	A4 s/s
P0370.400-A4	M40	40.5	63.5	14.0	7.0	A4 s/s
P0370.420-A4	M42	42.5	68.2	14.0	7.0	A4 s/s
P0370.480-A4	M48	49.0	75.0	14.0	7.0	A4 s/s



P0370.ZP



Material

Spring steel, zinc-plated.

Technical Notes

To DIN 127 B.

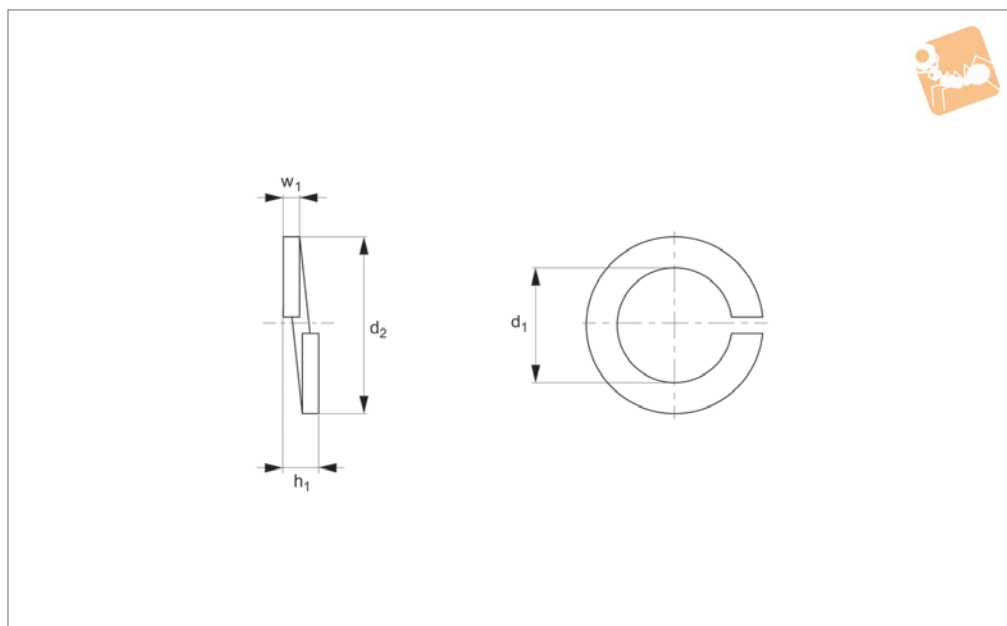
Order No.	For thread	d ₁	d ₂	h ₁ min.	w ₁	Material
P0370.020-ZP	M 2	2.1	4.4	1.0	0.5	Steel ZP
P0370.025-ZP	M2,5	2.6	5.1	1.2	0.6	Steel ZP
P0370.030-ZP	M 3	3.1	5.2	1.6	0.8	Steel ZP
P0370.035-ZP	M3,5	3.6	6.7	1.6	0.8	Steel ZP
P0370.040-ZP	M 4	4.1	7.6	1.8	0.9	Steel ZP
P0370.050-ZP	M 5	5.1	9.2	2.4	1.2	Steel ZP
P0370.060-ZP	M 6	6.1	11.8	3.2	1.6	Steel ZP
P0370.080-ZP	M 8	8.1	14.8	4.0	2.0	Steel ZP
P0370.100-ZP	M10	10.2	18.1	4.4	2.2	Steel ZP
P0370.120-ZP	M12	12.2	21.1	5.0	2.5	Steel ZP
P0370.140-ZP	M14	14.2	24.1	6.0	3.0	Steel ZP
P0370.160-ZP	M16	16.2	27.4	7.0	3.5	Steel ZP
P0370.180-ZP	M18	18.2	29.4	7.0	3.5	Steel ZP
P0370.200-ZP	M20	20.2	33.6	8.0	4.0	Steel ZP
P0370.220-ZP	M22	22.5	35.9	8.0	4.0	Steel ZP
P0370.240-ZP	M24	24.5	40.0	10.0	5.0	Steel ZP
P0370.270-ZP	M27	27.5	43.0	10.0	6.0	Steel ZP
P0370.300-ZP	M30	30.5	48.2	12.0	6.0	Steel ZP
P0370.360-ZP	M36	36.5	58.2	12.0	6.0	Steel ZP



Spring Washers Rectangular Section

Steel, self-coloured

Flat Washers



P0370.SC

FLAT WASHERS

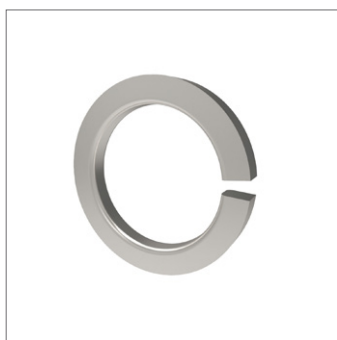
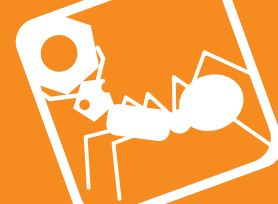
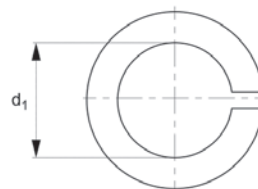
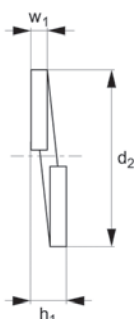
Material

Spring steel, self-colour.

Technical Notes

To DIN 127 B.

Order No.	For thread	d ₁	d ₂	h ₁ min.	w ₁	Material
P0370.020-SC	M 2	2.1	4.4	1.0	0.5	Steel SC
P0370.025-SC	M2,5	2.6	5.1	1.2	0.6	Steel SC
P0370.030-SC	M 3	3.1	5.2	1.6	0.8	Steel SC
P0370.035-SC	M3,5	3.6	6.7	1.6	0.8	Steel SC
P0370.040-SC	M 4	4.1	7.6	1.8	0.9	Steel SC
P0370.050-SC	M 5	5.1	9.2	2.4	1.2	Steel SC
P0370.060-SC	M 6	6.1	11.8	3.2	1.6	Steel SC
P0370.080-SC	M 8	8.1	14.8	4.0	2.0	Steel SC
P0370.100-SC	M10	10.2	18.1	4.4	2.2	Steel SC
P0370.120-SC	M12	12.2	21.1	5.0	2.5	Steel SC
P0370.140-SC	M14	14.2	24.1	6.0	3.0	Steel SC
P0370.160-SC	M16	16.2	27.4	7.0	3.5	Steel SC
P0370.180-SC	M18	18.2	29.4	7.0	3.5	Steel SC
P0370.200-SC	M20	20.2	33.6	8.0	4.0	Steel SC
P0370.220-SC	M22	22.5	35.9	8.0	4.0	Steel SC
P0370.240-SC	M24	24.5	40.0	10.0	5.0	Steel SC
P0370.270-SC	M27	27.5	43.0	10.0	6.0	Steel SC
P0370.300-SC	M30	30.5	48.2	12.0	6.0	Steel SC
P0370.360-SC	M36	36.5	58.2	12.0	6.0	Steel SC
P0370.400-SC	M40	40.5	63.5	14.0	7.0	Steel SC
P0370.420-SC	M42	42.5	68.2	14.0	7.0	Steel SC
P0370.480-SC	M48	49.0	75.0	14.0	7.0	Steel SC

**P0371.A2****Material**

Stainless steel (A2, AISI 303).

Technical Notes

To DIN 7980. For screws with cylindrical heads.

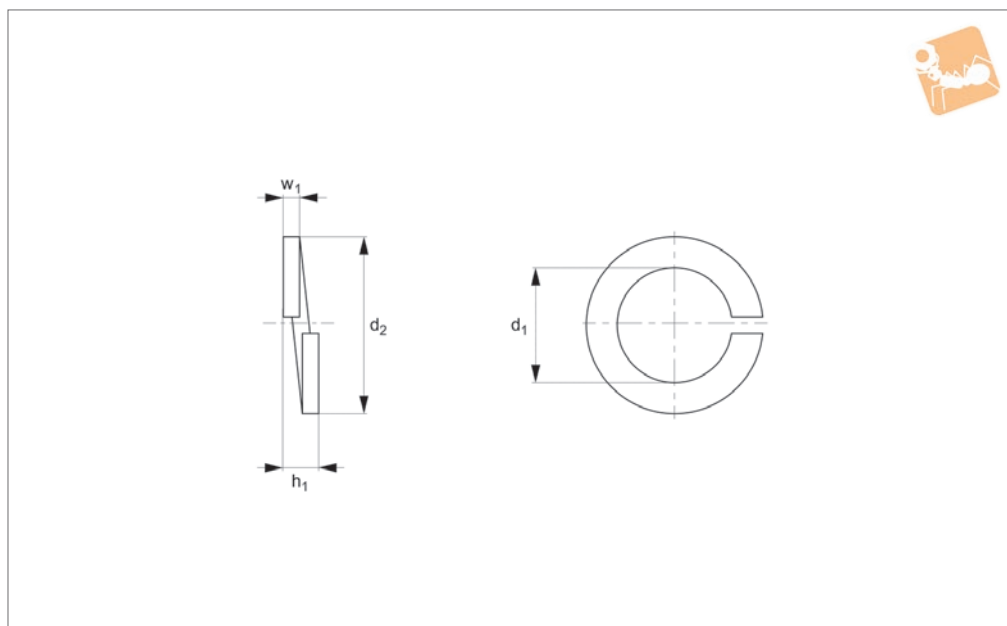
Order No.	Thread	d_1	d_2	h_1 min.	w_1	Material
P0371.030-A2	M 3	3.1	5.6	2.0	1.0	A2 s/s
P0371.035-A2	M3,5	3.6	6.1	2.0	1.0	A2 s/s
P0371.040-A2	M 4	4.1	7.0	2.4	1.2	A2 s/s
P0371.050-A2	M 5	5.1	8.8	3.2	1.6	A2 s/s
P0371.060-A2	M 6	6.1	9.9	3.2	1.6	A2 s/s
P0371.080-A2	M 8	8.1	12.7	4.0	2.0	A2 s/s
P0371.100-A2	M10	10.2	16.0	5.0	2.5	A2 s/s
P0371.120-A2	M12	12.2	18.0	5.0	2.5	A2 s/s
P0371.140-A2	M14	14.2	21.1	6.0	3.0	A2 s/s
P0371.160-A2	M16	24.4	24.4	7.0	3.5	A2 s/s
P0371.180-A2	M18	18.2	26.4	7.0	3.5	A2 s/s
P0371.200-A2	M20	20.2	30.6	9.0	4.5	A2 s/s
P0371.220-A2	M22	22.5	32.9	9.0	4.5	A2 s/s
P0371.240-A2	M24	24.4	35.9	10.0	5.0	A2 s/s
P0371.270-A2	M27	27.5	38.9	10.0	5.0	A2 s/s
P0371.300-A2	M30	30.5	44.1	12.0	6.0	A2 s/s



Spring Washers Square Section

A4 stainless

Flat Washers



P0371.A4

FLAT WASHERS

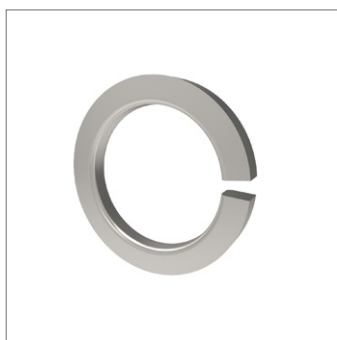
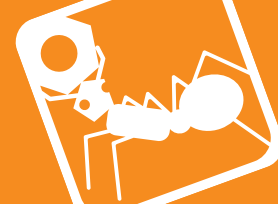
Material

Stainless steel (A4, AISI 316)

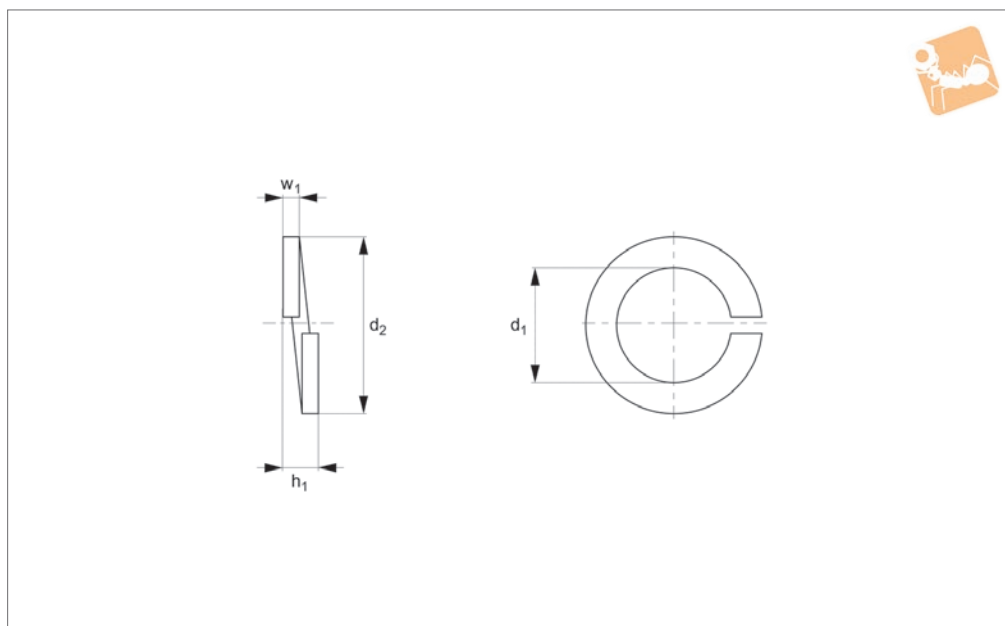
Technical Notes

To DIN 7980. For screws with cylindrical heads.

Order No.	Thread	d ₁	d ₂	h ₁ min.	w ₁	Material
P0371.030-A4	M 3	3.1	5.6	2.0	1.0	A4 s/s
P0371.040-A4	M 4	4.1	7.0	2.4	1.2	A4 s/s
P0371.050-A4	M 5	5.1	8.8	3.2	1.6	A4 s/s
P0371.060-A4	M 6	6.1	9.9	3.2	1.6	A4 s/s
P0371.080-A4	M 8	8.1	12.7	4.0	2.0	A4 s/s
P0371.100-A4	M10	10.2	16.0	5.0	2.5	A4 s/s
P0371.120-A4	M12	12.2	18.0	5.0	2.5	A4 s/s
P0371.140-A4	M14	14.2	21.1	6.0	3.0	A4 s/s
P0371.160-A4	M16	16.2	24.4	7.0	3.5	A4 s/s
P0371.180-A4	M18	18.2	26.4	7.0	3.5	A4 s/s
P0371.200-A4	M20	20.2	30.6	9.0	4.5	A4 s/s
P0371.220-A4	M22	22.5	32.9	9.0	4.5	A4 s/s
P0371.240-A4	M24	24.4	35.9	10.0	5.0	A4 s/s
P0371.270-A4	M27	27.5	38.9	10.0	5.0	A4 s/s
P0371.300-A4	M30	30.5	44.1	12.0	6.0	A4 s/s



P0371.ZP



Material

Spring steel, zinc-plated.

Technical Notes

To DIN 7980. For screws with cylindrical heads.

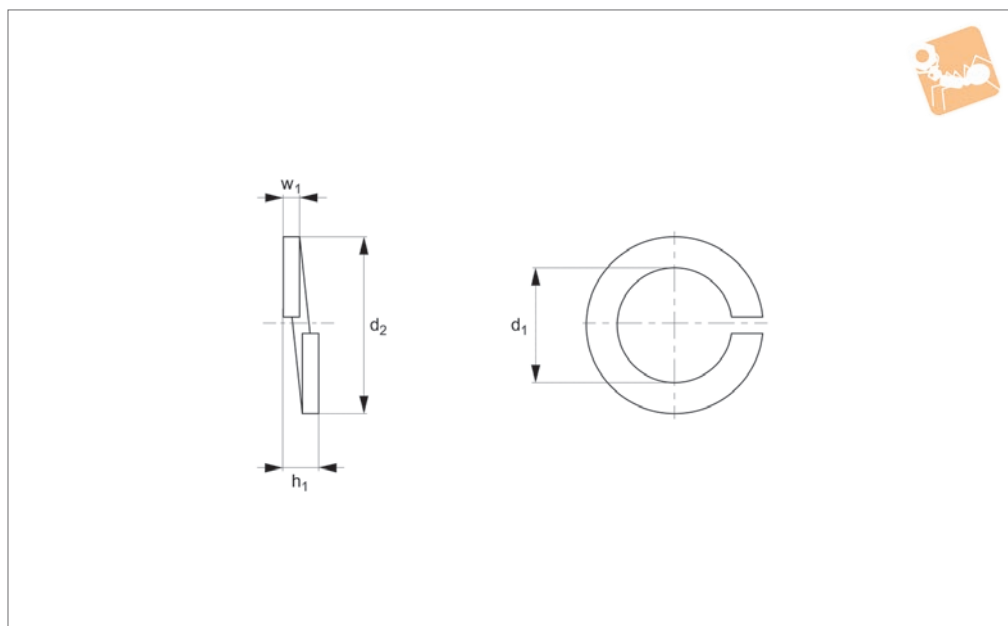
Order No.	Thread	d ₁	d ₂	h ₁ min.	w ₁	Material
P0371.030-ZP	M 3	3.1	5.6	2.0	1.0	Steel ZP
P0371.035-ZP	M3,5	3.6	6.1	2.0	1.0	Steel ZP
P0371.040-ZP	M 4	4.1	7.0	2.4	1.2	Steel ZP
P0371.050-ZP	M 5	5.1	8.8	3.2	1.6	Steel ZP
P0371.060-ZP	M 6	6.1	9.9	3.2	1.6	Steel ZP
P0371.080-ZP	M 8	8.1	12.7	4.0	2.0	Steel ZP
P0371.100-ZP	M10	10.2	16.0	5.0	2.5	Steel ZP
P0371.120-ZP	M12	12.2	18.0	5.0	2.5	Steel ZP
P0371.140-ZP	M14	14.2	21.1	6.0	3.0	Steel ZP
P0371.160-ZP	M16	24.4	24.4	7.0	3.5	Steel ZP
P0371.180-ZP	M18	18.2	26.4	7.0	3.5	Steel ZP
P0371.200-ZP	M20	20.2	30.6	9.0	4.5	Steel ZP
P0371.220-ZP	M22	22.5	32.9	9.0	4.5	Steel ZP
P0371.240-ZP	M24	24.4	35.9	10.0	5.0	Steel ZP



Spring Washers Square Section

Steel, self-coloured

Flat Washers



P0371.SC

FLAT WASHERS

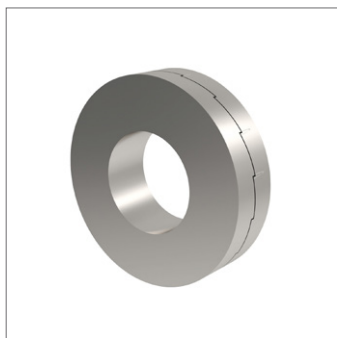
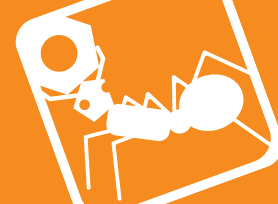
Material

Spring steel, self-colour.

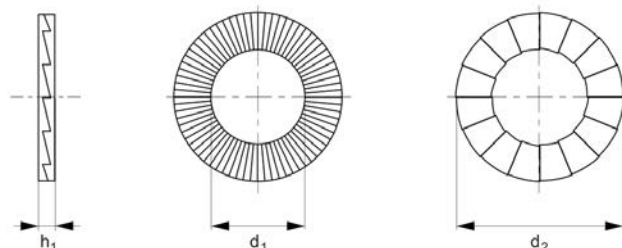
Technical Notes

To DIN 7980. For screws with cylindrical heads.

Order No.	Thread	d ₁	d ₂	h ₁ min.	w ₁	Material
P0371.030-SC	M 3	3.1	5.6	2.0	1.0	Steel SC
P0371.035-SC	M3,5	3.6	6.1	2.0	1.0	Steel SC
P0371.040-SC	M 4	4.1	7.0	2.4	1.2	Steel SC
P0371.050-SC	M 5	5.1	8.8	3.2	1.6	Steel SC
P0371.060-SC	M 6	6.1	9.9	3.2	1.6	Steel SC
P0371.080-SC	M 8	8.1	12.7	4.0	2.0	Steel SC
P0371.100-SC	M10	10.2	16.0	5.0	2.5	Steel SC
P0371.120-SC	M12	12.2	18.0	5.0	2.5	Steel SC
P0371.140-SC	M14	14.2	21.1	6.0	3.0	Steel SC
P0361.160-SC	M16	24.4	24.4	7.0	3.5	Steel SC
P0371.180-SC	M18	18.2	26.4	7.0	3.5	Steel SC
P0371.200-SC	M20	20.2	30.6	9.0	4.5	Steel SC
P0371.220-SC	M22	22.5	32.9	9.0	4.5	Steel SC
P0371.240-SC	M24	24.4	35.9	10.0	5.0	Steel SC
P0371.270-SC	M27	27.5	38.9	10.0	5.0	Steel SC
P0371.300-SC	M30	30.5	44.1	12.0	6.0	Steel SC



P0367.A4



Material

Stainless steel (A4, AISI 316).

dynamic loads. Washers are installed in pairs, wedge face to wedge face.

Technical Notes

Locking washer for vibration proofing and

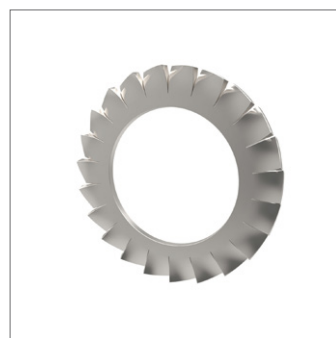
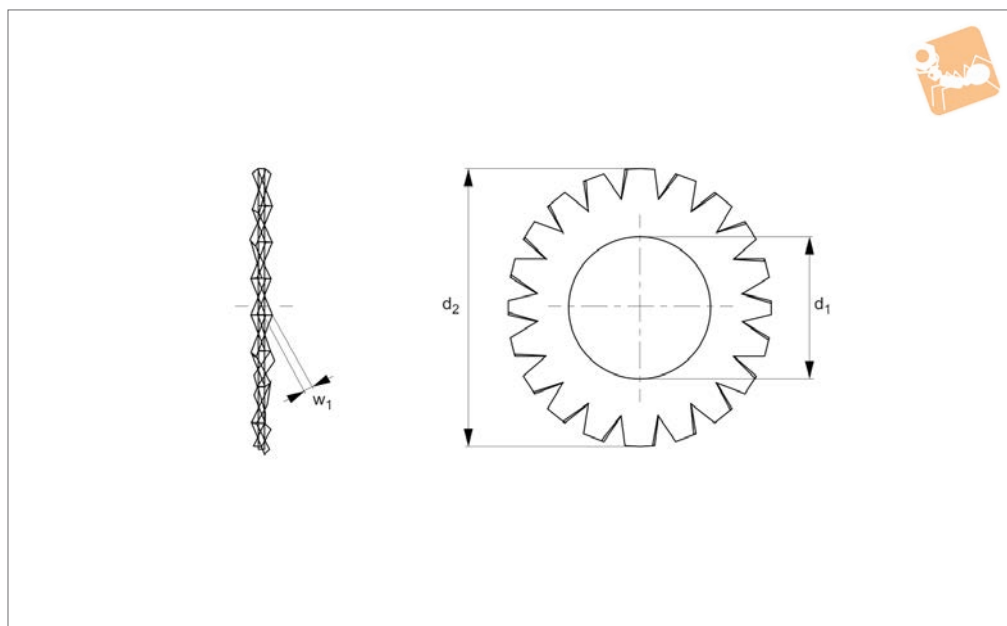
Order No.	For thread	d ₁	d ₂	h ₁	Material
P0367.030-A4	M 3	3.4	7.0	1.8	A4 s/s
P0367.040-A4	M 4	4.4	7.6	1.8	A4 s/s
P0367.050-A4	M 5	5.4	9.0	1.8	A4 s/s
P0367.060-A4	M 6	6.5	10.8	1.8	A4 s/s
P0367.080-A4	M 8	8.7	13.5	2.5	A4 s/s
P0367.100-A4	M10	10.7	16.6	2.5	A4 s/s
P0367.120-A4	M12	13	19.5	2.5	A4 s/s
P0367.140-A4	M14	15.2	23.0	3.4	A4 s/s
P0367.160-A4	M16	17	25.4	3.4	A4 s/s
P0367.180-A4	M18	19.5	29.0	3.4	A4 s/s
P0367.200-A4	M20	21.4	30.7	3.4	A4 s/s
P0367.220-A4	M22	23.4	34.5	3.4	A4 s/s
P0367.240-A4	M24	25.3	39.0	3.4	A4 s/s
P0367.270-A4	M27	28.4	42.0	6.6	A4 s/s
P0367.300-A4	M30	31.4	47.0	6.6	A4 s/s
P0367.330-A4	M33	34.4	48.5	6.3	A4 s/s
P0367.360-A4	M36	37.4	55.0	6.6	A4 s/s
P0367.420-A4	M42	43.2	63.0	6.6	A4 s/s



External Serrated Lock Washers

A2 stainless

Flat Washers



P0372.A2

FLAT WASHERS

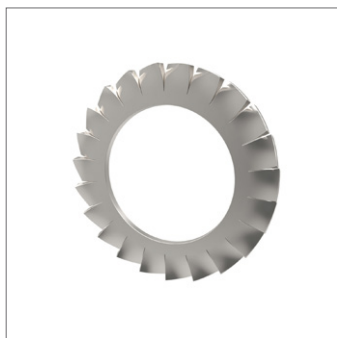
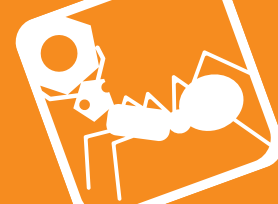
Material

Stainless steel (A2, AISI 303).

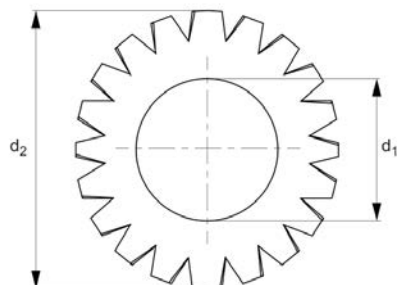
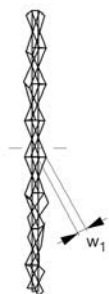
Technical Notes

To DIN 6798 A.

Order No.	d ₁ for thread	d ₂	w ₁	Material
P0372.020-A2	M 2	4.5	0.3	A2 s/s
P0372.025-A2	M2,5	5.5	0.4	A2 s/s
P0372.030-A2	M 3	6.0	0.4	A2 s/s
P0372.035-A2	M3,5	7.0	0.5	A2 s/s
P0372.040-A2	M 4	8.0	0.5	A2 s/s
P0372.050-A2	M 5	9.0	0.6	A2 s/s
P0372.051-A2	M 5	10.0	0.6	A2 s/s
P0372.060-A2	M 6	11.0	0.7	A2 s/s
P0372.070-A2	M 7	12.5	0.8	A2 s/s
P0372.080-A2	M 8	14.0	0.8	A2 s/s
P0372.081-A2	M 8	15.0	0.9	A2 s/s
P0372.100-A2	M10	18.0	1.0	A2 s/s
P0372.120-A2	M12	20.5	1.0	A2 s/s
P0372.140-A2	M14	24.0	1.2	A2 s/s
P0372.160-A2	M16	26.0	1.4	A2 s/s
P0372.180-A2	M18	30.0	1.4	A2 s/s
P0372.200-A2	M20	33.0	1.5	A2 s/s
P0372.220-A2	M22	36.0	1.5	A2 s/s
P0372.240-A2	M24	38.0	1.6	A2 s/s
P0372.270-A2	M27	44.0	1.6	A2 s/s
P0372.300-A2	M30	48.0	1.6	A2 s/s



P0372.A4



Material

Stainless steel (A4, AISI 316)

Technical Notes

To DIN 6798 A.

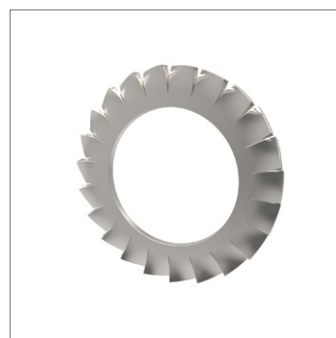
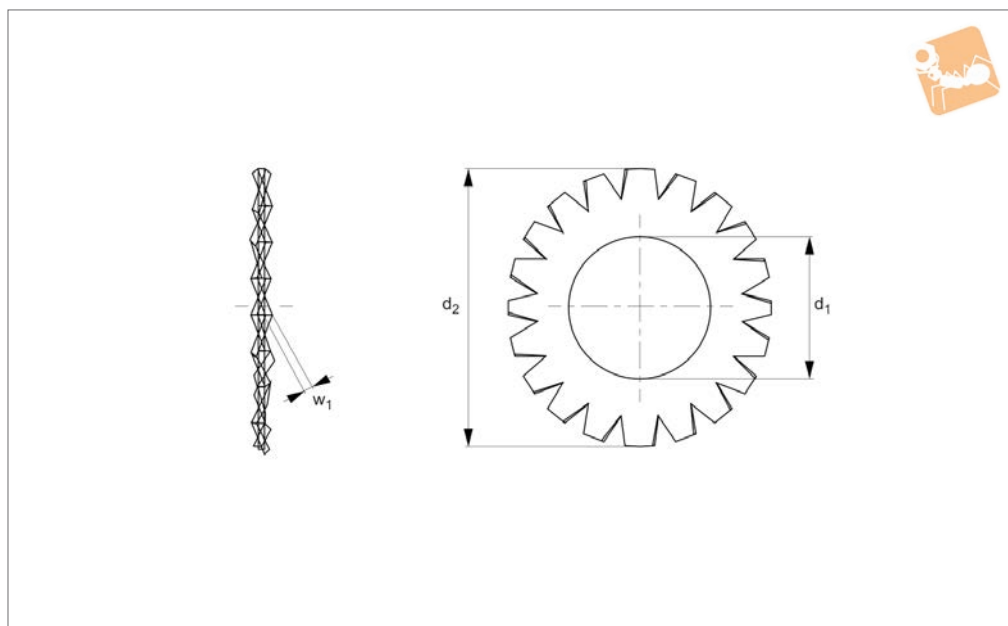
Order No.	d ₁ for thread	d ₂	w ₁	Material
P0372.020-A4	M 2	4.5	0.3	A4 s/s
P0372.025-A4	M2,5	5.5	0.4	A4 s/s
P0372.030-A4	M 3	6.0	0.4	A4 s/s
P0372.035-A4	M3,5	7.0	0.5	A4 s/s
P0372.040-A4	M 4	8.0	0.5	A4 s/s
P0372.050-A4	M 5	9.0	0.6	A4 s/s
P0372.051-A4	M 5	10.0	0.6	A4 s/s
P0372.060-A4	M 6	11.0	0.7	A4 s/s
P0372.070-A4	M 7	12.5	0.8	A4 s/s
P0372.080-A4	M 8	14.0	0.8	A4 s/s
P0372.081-A4	M 8	15.0	0.8	A4 s/s
P0372.090-A4	M 9	15.0	0.9	A4 s/s
P0372.100-A4	M10	18.0	1.0	A4 s/s
P0372.120-A4	M12	20.5	1.0	A4 s/s
P0372.140-A4	M14	24.0	1.2	A4 s/s
P0372.160-A4	M16	26.0	1.4	A4 s/s
P0372.180-A4	M18	30.0	1.4	A4 s/s
P0372.200-A4	M20	33.0	1.5	A4 s/s
P0372.220-A4	M22	36.0	1.5	A4 s/s
P0372.240-A4	M24	38.0	1.6	A4 s/s
P0372.270-A4	M27	44.0	1.6	A4 s/s
P0372.300-A4	M30	48.0	1.6	A4 s/s



External Serrated Lock Washers

Steel, zinc-plated

Flat Washers



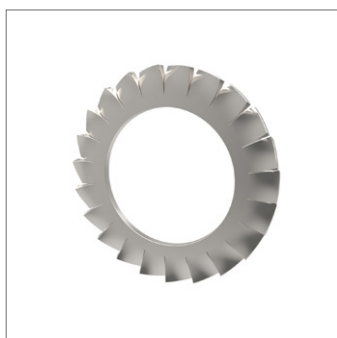
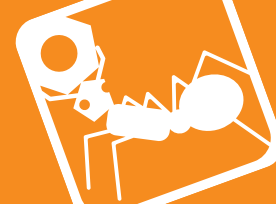
P0372.ZP

FLAT WASHERS

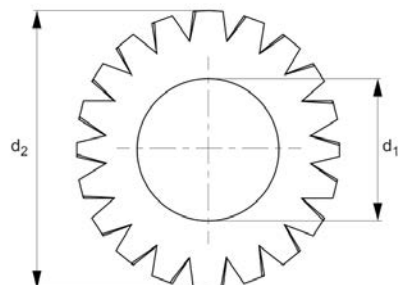
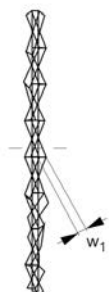
Material
Spring steel, zinc-plated.

Technical Notes
To DIN 6798 A.

Order No.	d ₁ for thread	d ₂	w ₁	Material
P0372.020-ZP	M 2	4.5	0.3	Steel ZP
P0372.025-ZP	M2,5	5.5	0.4	Steel ZP
P0372.030-ZP	M 3	6.0	0.4	Steel ZP
P0372.035-ZP	M3,5	7.0	0.5	Steel ZP
P0372.040-ZP	M 4	8.0	0.5	Steel ZP
P0372.050-ZP	M 5	9.0	0.6	Steel ZP
P0372.051-ZP	M 5	10.0	0.6	Steel ZP
P0372.060-ZP	M 6	11.0	0.7	Steel ZP
P0372.070-ZP	M 7	12.5	0.8	Steel ZP
P0372.080-ZP	M 8	14.0	0.8	Steel ZP
P0372.081-ZP	M 8	14.0	0.8	Steel ZP
P0372.090-ZP	M 9	15.0	0.9	Steel ZP
P0372.100-ZP	M10	18.0	1.0	Steel ZP
P0372.120-ZP	M12	20.5	1.0	Steel ZP
P0372.140-ZP	M14	24.0	1.2	Steel ZP
P0372.160-ZP	M16	26.0	1.4	Steel ZP
P0372.180-ZP	M18	30.0	1.4	Steel ZP
P0372.200-ZP	M20	33.0	1.5	Steel ZP
P0372.220-ZP	M22	36.0	1.5	Steel ZP
P0372.240-ZP	M24	38.0	1.6	Steel ZP



P0372.SC



Material

Spring steel, self-colour.

Technical Notes

To DIN 6798 A.

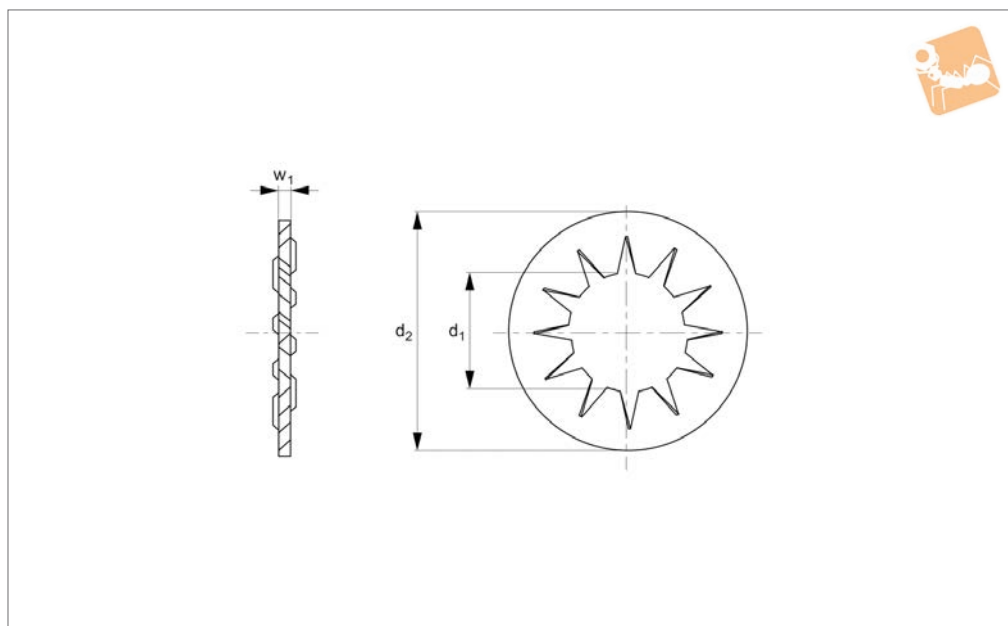
Order No.	d ₁ for thread	d ₂	w ₁	Material
P0372.020-SC	M 2	4.5	0.3	Steel SC
P0372.025-SC	M2,5	5.5	0.4	Steel SC
P0372.030-SC	M 3	6.0	0.4	Steel SC
P0372.035-SC	M3,5	7.0	0.5	Steel SC
P0372.040-SC	M 4	8.0	0.5	Steel SC
P0372.050-SC	M 5	9.0	0.6	Steel SC
P0372.051-SC	M 5	10.0	0.6	Steel SC
P0372.060-SC	M 6	11.0	0.7	Steel SC
P0372.070-SC	M 7	12.5	0.8	Steel SC
P0372.080-SC	M 8	14.0	0.8	Steel SC
P0372.081-SC	M 8	14.0	0.8	Steel SC
P0372.090-SC	M 9	15.0	0.9	Steel SC
P0372.100-SC	M10	18.0	1.0	Steel SC
P0372.120-SC	M12	20.5	1.0	Steel SC
P0372.140-SC	M14	24.0	1.2	Steel SC
P0372.160-SC	M16	26.0	1.4	Steel SC
P0372.180-SC	M18	30.0	1.4	Steel SC
P0372.200-SC	M20	33.0	1.5	Steel SC
P0372.220-SC	M22	36.0	1.5	Steel SC
P0372.240-SC	M24	38.0	1.6	Steel SC
P0372.270-SC	M27	44.0	1.6	Steel SC
P0372.300-SC	M30	48.0	1.6	Steel SC



Internal Serrated Lock Washers

A2 stainless

Flat Washers



P0373.A2

FLAT WASHERS

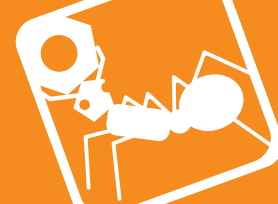
Material

Stainless steel (A2, AISI 303).

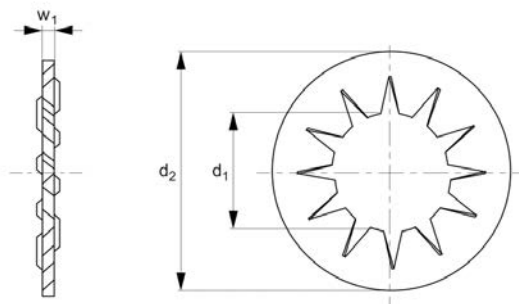
Technical Notes

To DIN 6798 B.

Order No.	d ₁ for thread	d ₂	w ₁	Material
P0373.020-A2	M 2	4.5	0.3	A2 s/s
P0373.025-A2	M2,5	5.5	0.4	A2 s/s
P0373.030-A2	M 3	6.0	0.4	A2 s/s
P0373.035-A2	M3,5	7.0	0.5	A2 s/s
P0373.040-A2	M 4	8.0	0.5	A2 s/s
P0373.050-A2	M 5	10.0	0.6	A2 s/s
P0373.060-A2	M 6	11.0	0.7	A2 s/s
P0373.070-A2	M 7	12.5	0.8	A2 s/s
P0373.080-A2	M 8	15.0	0.8	A2 s/s
P0373.100-A2	M10	18.0	0.9	A2 s/s
P0373.120-A2	M12	20.5	1.0	A2 s/s
P0373.140-A2	M14	24.0	1.0	A2 s/s
P0373.160-A2	M16	26.0	1.2	A2 s/s
P0373.180-A2	M18	30.0	1.4	A2 s/s
P0373.200-A2	M20	33.0	1.4	A2 s/s
P0373.220-A2	M22	36.0	1.5	A2 s/s
P0373.240-A2	M24	38.0	1.5	A2 s/s
P0373.270-A2	M27	44.0	1.6	A2 s/s
P0373.300-A2	M30	48.0	1.6	A2 s/s



P0373.A4



Material

Stainless steel (A4, AISI 316).

Technical Notes

To DIN 6798 B.

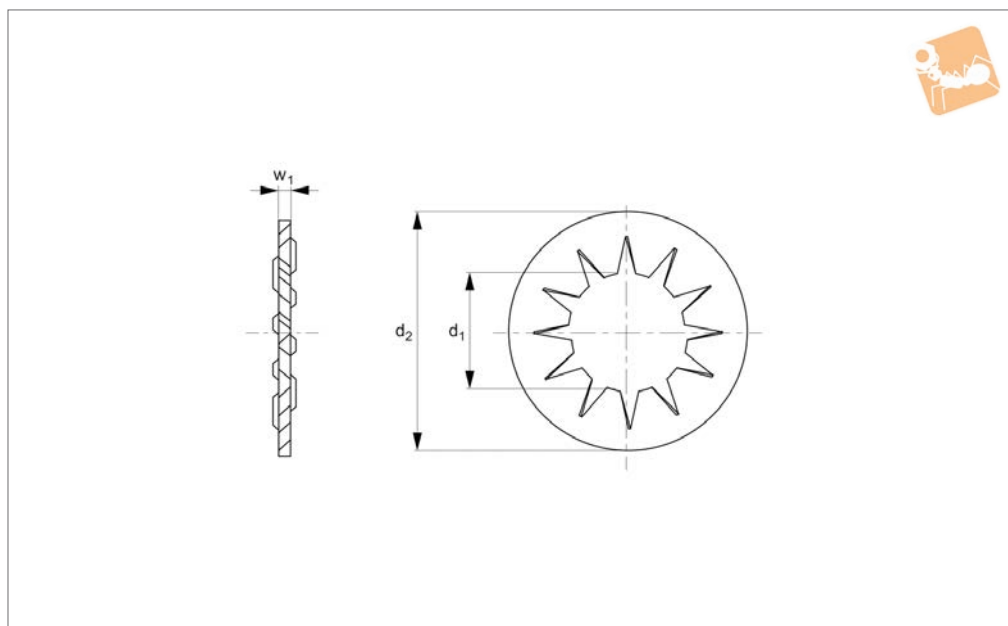
Order No.	d ₁ for thread	d ₂	w ₁	Material
P0373.020-A4	M 2	4.5	0.3	A4 s/s
P0373.025-A4	M2,5	5.5	0.4	A4 s/s
P0373.030-A4	M 3	6.0	0.4	A4 s/s
P0373.035-A4	M3,5	7.0	0.5	A4 s/s
P0373.040-A4	M 4	8.0	0.5	A4 s/s
P0373.050-A4	M 5	10.0	0.6	A4 s/s
P0373.060-A4	M 6	11.0	0.7	A4 s/s
P0373.070-A4	M 7	12.5	0.8	A4 s/s
P0373.080-A4	M 8	15.0	0.8	A4 s/s
P0373.100-A4	M10	18.0	0.9	A4 s/s
P0373.120-A4	M12	20.5	1.0	A4 s/s
P0373.140-A4	M14	24.0	1.0	A4 s/s
P0373.160-A4	M16	26.0	1.2	A4 s/s
P0373.180-A4	M18	30.0	1.4	A4 s/s
P0373.200-A4	M20	33.0	1.4	A4 s/s
P0373.220-A4	M22	36.0	1.5	A4 s/s
P0373.240-A4	M24	38.0	1.5	A4 s/s
P0373.270-A4	M27	44.0	1.6	A4 s/s
P0373.300-A4	M30	48.0	1.6	A4 s/s



Internal Serrated Lock Washers

Steel, zinc-plated

Flat Washers



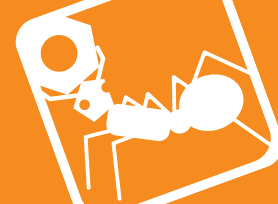
P0373.ZP

FLAT WASHERS

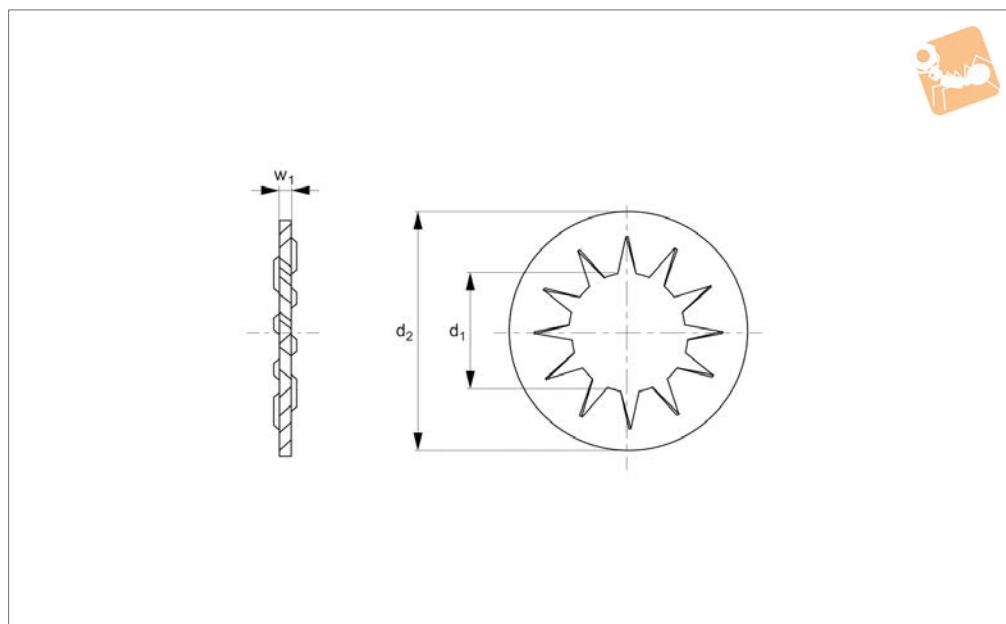
Material
Spring steel, zinc-plated.

Technical Notes
To DIN 6798 B.

Order No.	d ₁ for thread	d ₂	w ₁	Material
P0373.020-ZP	M 2	4.5	0.3	Steel ZP
P0373.025-ZP	M2,5	5.5	0.4	Steel ZP
P0373.030-ZP	M 3	6.0	0.4	Steel ZP
P0373.035-ZP	M3,5	7.0	0.5	Steel ZP
P0373.040-ZP	M 4	8.0	0.5	Steel ZP
P0373.050-ZP	M 5	10.0	0.6	Steel ZP
P0373.060-ZP	M 6	11.0	0.7	Steel ZP
P0373.070-ZP	M 7	12.5	0.8	Steel ZP
P0373.080-ZP	M 8	15.0	0.8	Steel ZP
P0373.100-ZP	M10	18.0	0.9	Steel ZP
P0373.120-ZP	M12	20.5	1.0	Steel ZP
P0373.140-ZP	M14	24.0	1.0	Steel ZP
P0373.160-ZP	M16	26.0	1.2	Steel ZP
P0373.180-ZP	M18	30.0	1.4	Steel ZP
P0373.200-ZP	M20	33.0	1.4	Steel ZP
P0373.220-ZP	M22	36.0	1.5	Steel ZP
P0373.240-ZP	M24	38.0	1.5	Steel ZP



P0373.SC



Material

Spring steel, self-colour.

Technical Notes

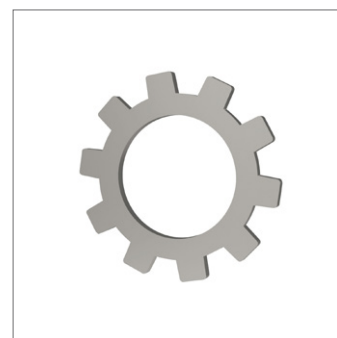
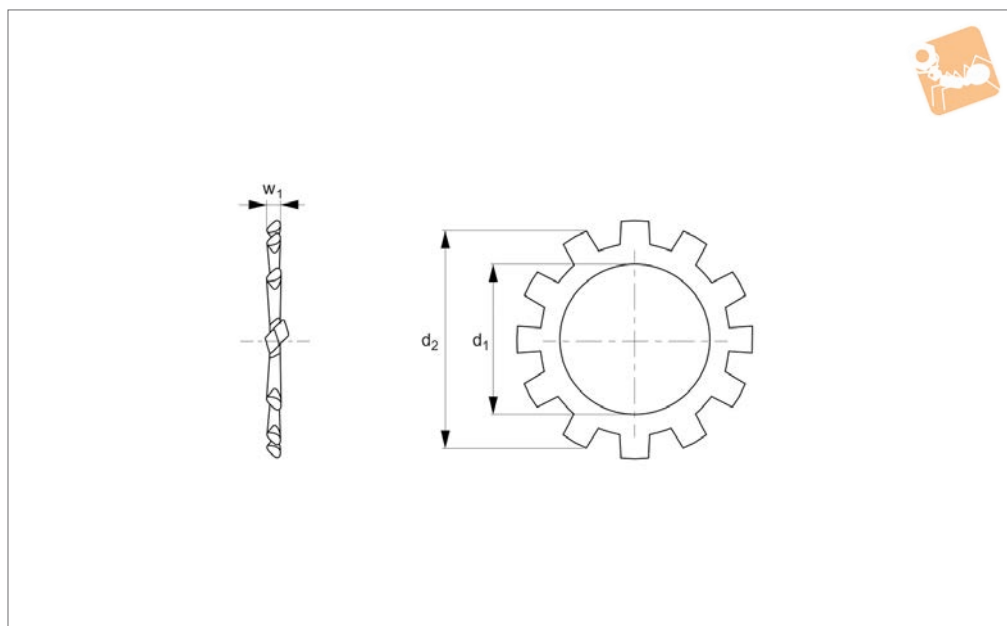
To DIN 6798 B.

Order No.	d ₁ for thread	d ₂	w ₁	Material
P0373.020-SC	M 2	4.5	0.3	Steel SC
P0373.025-SC	M2,5	5.5	0.4	Steel SC
P0373.030-SC	M 3	6.0	0.4	Steel SC
P0373.035-SC	M3,5	7.0	0.5	Steel SC
P0373.040-SC	M 4	8.0	0.5	Steel SC
P0373.050-SC	M 5	10.0	0.6	Steel SC
P0373.060-SC	M 6	11.0	0.7	Steel SC
P0373.070-SC	M 7	12.5	0.8	Steel SC
P0373.080-SC	M 8	15.0	0.8	Steel SC
P0373.100-SC	M10	18.0	0.9	Steel SC
P0373.120-SC	M12	20.5	1.0	Steel SC
P0373.140-SC	M14	24.0	1.0	Steel SC
P0373.160-SC	M16	26.0	1.2	Steel SC
P0373.180-SC	M18	30.0	1.4	Steel SC
P0373.200-SC	M20	33.0	1.4	Steel SC
P0373.220-SC	M22	36.0	1.5	Steel SC
P0373.240-SC	M24	38.0	1.5	Steel SC
P0373.270-SC	M27	44.0	1.6	Steel SC
P0373.300-SC	M30	48.0	1.6	Steel SC



External A2 Tooth Washers

A2 stainless



P0374.A2

FLAT WASHERS

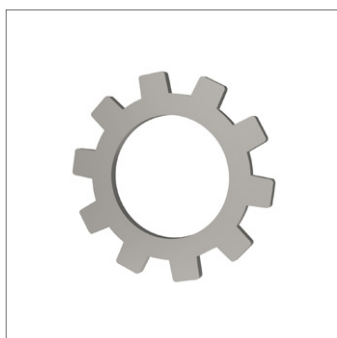
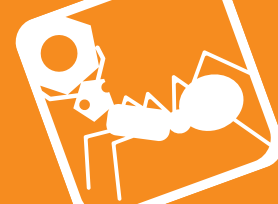
Material

Stainless steel (A2, AISI 303).

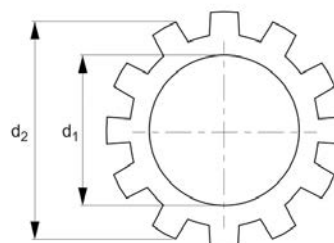
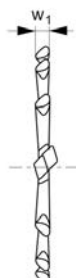
Technical Notes

To DIN 6797 A2.

Order No.	d ₁ for thread	d ₂	w ₁	Material
P0374.020-A2	M 2	4.5	0.3	A2 s/s
P0374.025-A2	M2,5	5.5	0.4	A2 s/s
P0374.030-A2	M 3	5.5	0.4	A2 s/s
P0374.035-A2	M3,5	6.0	0.4	A2 s/s
P0374.040-A2	M 4	7.0	0.5	A2 s/s
P0374.050-A2	M 5	8.0	0.5	A2 s/s
P0374.060-A2	M 6	11.0	0.7	A2 s/s
P0374.070-A2	M 7	12.5	0.8	A2 s/s
P0374.080-A2	M 8	15.0	0.8	A2 s/s
P0374.100-A2	M10	18.0	0.9	A2 s/s
P0374.120-A2	M12	20.5	1.0	A2 s/s
P0374.140-A2	M14	24.0	1.0	A2 s/s
P0374.160-A2	M 16	26.0	1.2	A2 s/s
P0374.180-A2	M18	30.0	1.4	A2 s/s
P0374.200-A2	M20	33.0	1.4	A2 s/s
P0374.220-A2	M22	36.0	1.5	A2 s/s
P0374.240-A2	M24	38.0	1.5	A2 s/s
P0374.270-A2	M27	44.0	1.6	A2 s/s
P0374.300-A2	M30	48.0	1.6	A2 s/s



P0374.A4



Material

Stainless steel (A4, AISI 316).

Technical Notes

To DIN 6798A.

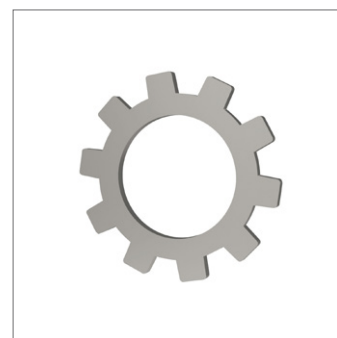
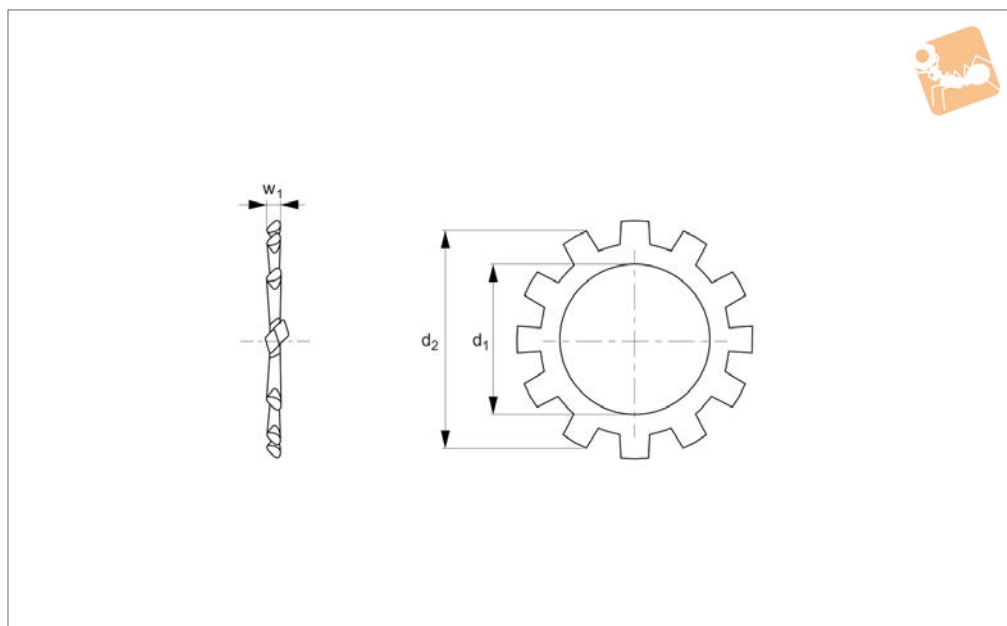
Order No.	d ₁ for thread	d ₂	w ₁	Material
P0374.020-A4	M 2	4.5	0.3	A4 s/s
P0374.025-A4	M2,5	5.5	0.4	A4 s/s
P0374.030-A4	M 3	5.5	0.4	A4 s/s
P0374.035-A4	M3,5	6.0	0.4	A4 s/s
P0374.040-A4	M 4	7.0	0.5	A4 s/s
P0374.050-A4	M 5	8.0	0.5	A4 s/s
P0374.060-A4	M 6	11.0	0.7	A4 s/s
P0374.070-A4	M 7	12.5	0.8	A4 s/s
P0374.080-A4	M 8	15.0	0.8	A4 s/s
P0374.100-A4	M10	18.0	0.9	A4 s/s
P0374.120-A4	M12	20.5	1.0	A4 s/s
P0374.140-A4	M14	24.0	1.0	A4 s/s
P0374.160-A4	M 16	26.0	1.2	A4 s/s
P0374.180-A4	M18	30.0	1.4	A4 s/s
P0374.200-A4	M20	33.0	1.4	A4 s/s
P0374.220-A4	M22	36.0	1.5	A4 s/s
P0374.240-A4	M24	38.0	1.5	A4 s/s
P0374.270-A4	M27	44.0	1.6	A4 s/s
P0374.300-A4	M30	48.0	1.6	A4 s/s



External ZP Tooth Washers

Steel, zinc-plated

Flat Washers



P0374.ZP

FLAT WASHERS

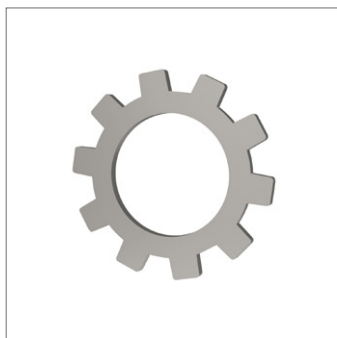
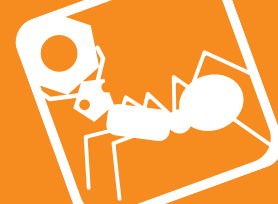
Material

Spring steel, zinc-plated.

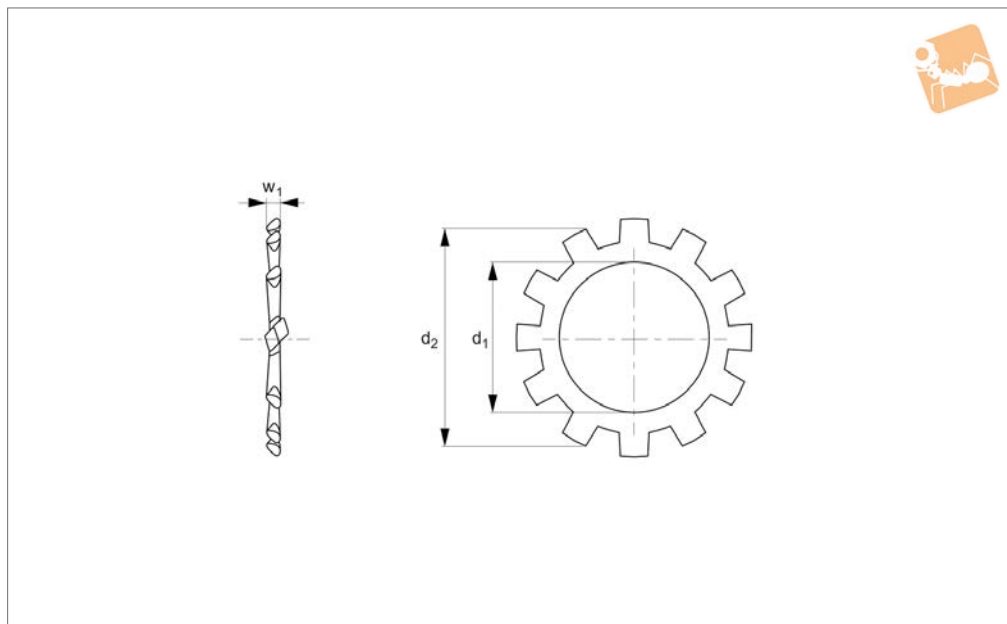
Technical Notes

To DIN 6797 AZ.

Order No.	d ₁ for thread	d ₂	w ₁	Material
P0374.030-ZP	M 3	5.5	0.4	Steel ZP
P0374.040-ZP	M 4	7.0	0.5	Steel ZP
P0374.050-ZP	M 5	8.0	0.5	Steel ZP
P0374.060-ZP	M 6	11.0	0.7	Steel ZP
P0374.080-ZP	M 8	15.0	0.8	Steel ZP
P0374.100-ZP	M10	18.0	0.9	Steel ZP



P0374.SC



Material

Spring steel, self-colour.

Technical Notes

To DIN 6797 AZ.

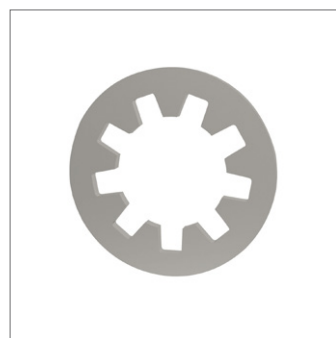
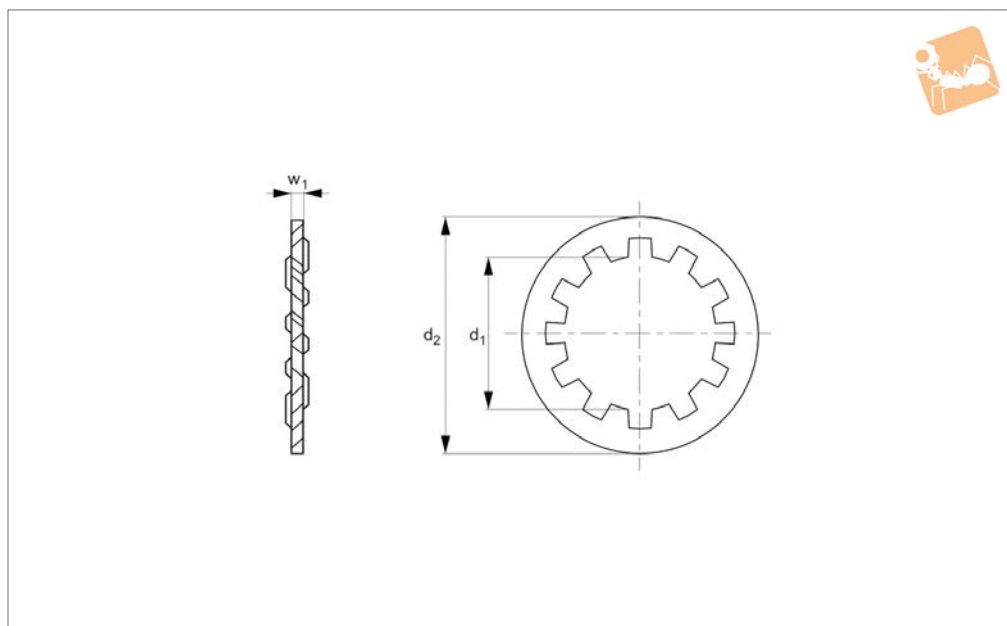
Order No.	d ₁ for thread	d ₂	w ₁	Material
P0374.030-SC	M 3	5.5	0.4	Steel SC
P0374.040-SC	M 4	7.0	0.5	Steel SC
P0374.050-SC	M 5	8.0	0.5	Steel SC
P0374.060-SC	M 6	11.0	0.7	Steel SC
P0374.080-SC	M 8	15.0	0.8	Steel SC
P0374.100-SC	M10	18.0	0.9	Steel SC
P0374.120-SC	M12	20.5	1.0	Steel SC
P0374.140-SC	M14	24.0	1.0	Steel SC
P0374.160-SC	M16	26.0	1.2	Steel SC
P0374.200-SC	M20	33.0	1.4	Steel SC
P0374.240-SC	M24	38.0	1.5	Steel SC



Internal A2 Tooth Washers

A2 stainless

Flat Washers



P0375.A2

FLAT WASHERS

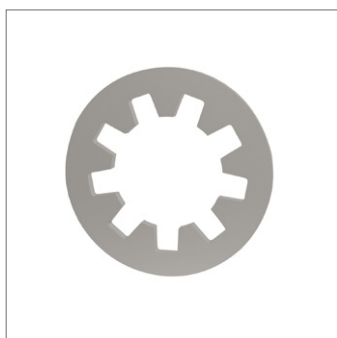
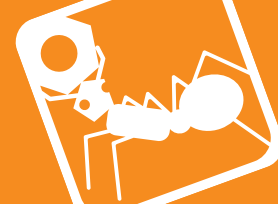
Material

Stainless steel (A2, AISI 303).

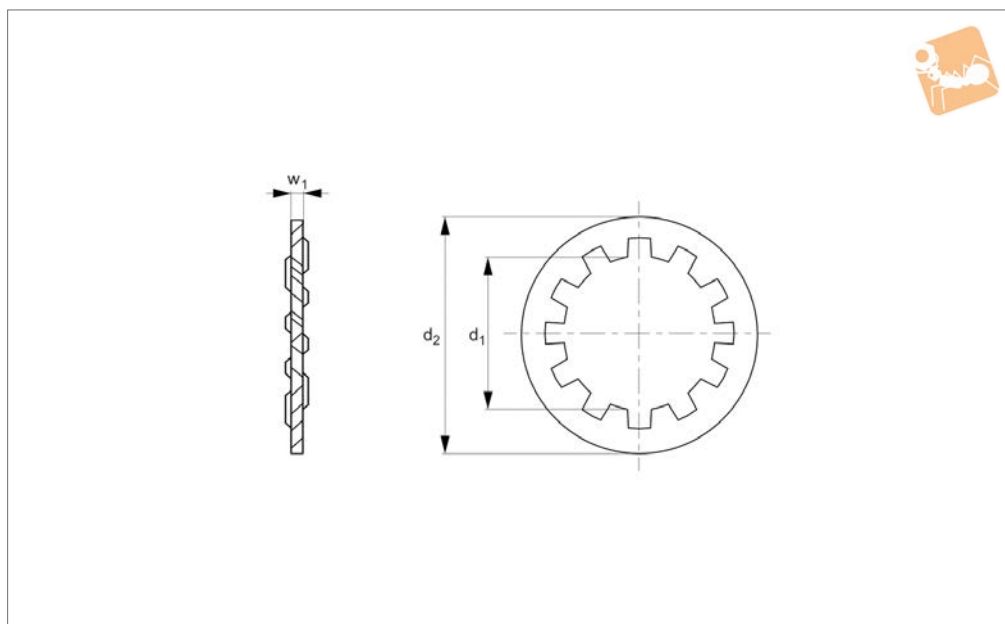
Technical Notes

To DIN 6797 IZ.

Order No.	d ₁ for thread	d ₂	w ₁	Material
P0375.020-A2	M 2	4.5	0.3	A2 s/s
P0375.025-A2	M2,5	5.5	0.4	A2 s/s
P0375.030-A2	M 3	6.0	0.4	A2 s/s
P0375.035-A2	M3,5	7.0	0.5	A2 s/s
P0375.040-A2	M 4	8.0	0.5	A2 s/s
P0375.050-A2	M 5	10.0	0.6	A2 s/s
P0375.060-A2	M 6	11.0	0.7	A2 s/s
P0375.070-A2	M 7	12.5	0.8	A2 s/s
P0375.080-A2	M 8	15.0	0.8	A2 s/s
P0375.100-A2	M10	18.0	0.9	A2 s/s
P0375.120-A2	M12	20.5	1.0	A2 s/s
P0375.140-A2	M14	24.0	1.0	A2 s/s
P0375.160-A2	M16	26.0	1.2	A2 s/s
P0375.180-A2	M18	30.0	1.4	A2 s/s
P0375.200-A2	M20	33.0	1.4	A2 s/s
P0375.220-A2	M22	36.0	1.5	A2 s/s
P0375.240-A2	M24	38.0	1.5	A2 s/s
P0375.270-A2	M27	44.0	1.6	A2 s/s
P0375.300-A2	M30	48.0	1.6	A2 s/s



P0375.A4



Material

Stainless steel (A4, AISI 316).

Technical Notes

To DIN 6798 J.

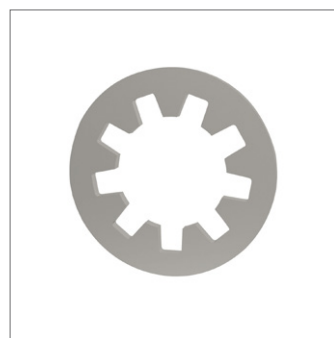
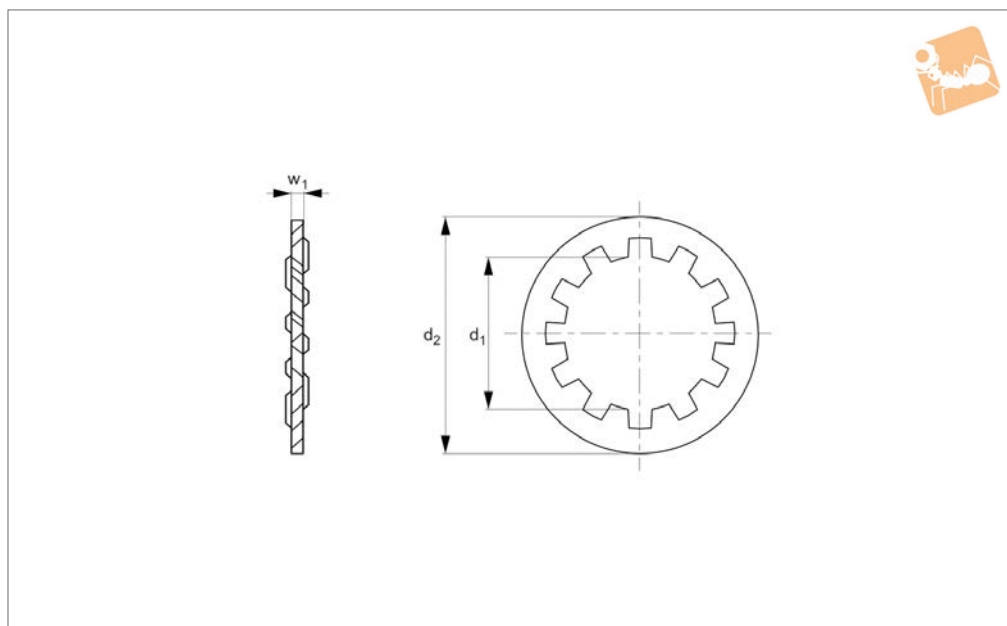
Order No.	d ₁ for thread	d ₂	w ₁	Material
P0375.020-A4	M 2	4.5	0.3	A4 s/s
P0375.025-A4	M2,5	5.5	0.4	A4 s/s
P0375.030-A4	M 3	6.0	0.4	A4 s/s
P0375.035-A4	M3,5	7.0	0.5	A4 s/s
P0375.040-A4	M 4	8.0	0.5	A4 s/s
P0375.050-A4	M 5	10.0	0.6	A4 s/s
P0375.060-A4	M 6	11.0	0.7	A4 s/s
P0375.070-A4	M 7	12.5	0.8	A4 s/s
P0375.080-A4	M 8	15.0	0.8	A4 s/s
P0375.100-A4	M10	18.0	0.9	A4 s/s
P0375.120-A4	M12	20.5	1.0	A4 s/s
P0375.140-A4	M14	24.0	1.0	A4 s/s
P0375.160-A4	M16	26.0	1.2	A4 s/s
P0375.180-A4	M18	30.0	1.4	A4 s/s
P0375.200-A4	M20	33.0	1.4	A4 s/s
P0375.220-A4	M22	36.0	1.5	A4 s/s
P0375.240-A4	M24	38.0	1.5	A4 s/s
P0375.270-A4	M27	44.0	1.6	A4 s/s
P0375.300-A4	M30	48.0	1.6	A4 s/s



Internal ZP Tooth Washers

Steel, zinc-plated

Flat Washers



P0375.ZP

FLAT WASHERS

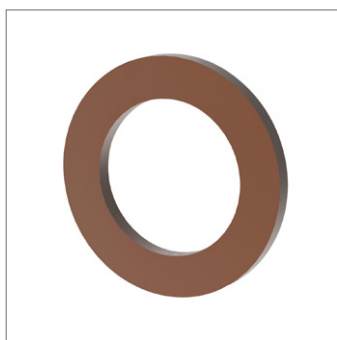
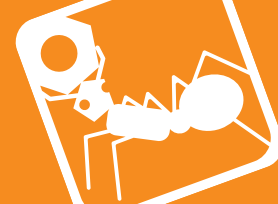
Material

Spring steel, zinc-plated.

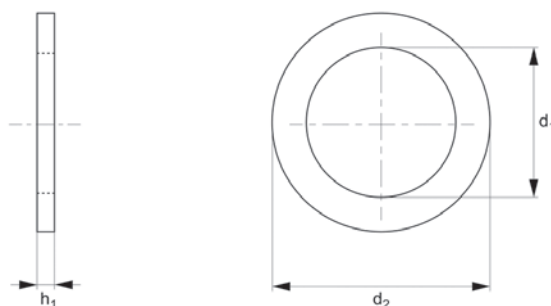
Technical Notes

To DIN 6797 IZ.

Order No.	d ₁ for thread	d ₂	w ₁	Material
P0375.020-ZP	M 2	4.5	0.3	Steel ZP
P0375.025-ZP	M2,5	5.5	0.4	Steel ZP
P0375.030-ZP	M 3	6.0	0.4	Steel ZP
P0375.035-ZP	M3,5	7.0	0.5	Steel ZP
P0375.040-ZP	M 4	8.0	0.5	Steel ZP
P0375.050-ZP	M 5	10.0	0.6	Steel ZP
P0375.060-ZP	M 6	11.0	0.7	Steel ZP
P0375.070-ZP	M 7	12.5	0.8	Steel ZP
P0375.080-ZP	M 8	15.0	0.8	Steel ZP
P0375.100-ZP	M10	18.0	0.9	Steel ZP
P0375.120-ZP	M12	20.5	1.0	Steel ZP
P0375.140-ZP	M14	24.0	1.0	Steel ZP
P0375.160-ZP	M16	26.0	1.2	Steel ZP
P0375.180-ZP	M18	30.0	1.4	Steel ZP
P0375.200-ZP	M20	33.0	1.4	Steel ZP
P0375.220-ZP	M22	36.0	1.5	Steel ZP
P0375.240-ZP	M24	38.0	1.5	Steel ZP
P0375.270-ZP	M27	44.0	1.6	Steel ZP
P0375.300-ZP	M30	48.0	1.6	Steel ZP



P0334.CU



Material

Copper.

Technical Notes

To DIN 7603 A. Used as sealing ring for pipe connections and blanking plugs.

Order No.	d ₁	d ₂	h ₁	Suitable for DIN 908 thread	Suitable for pipe thread
P0334.05-10-010	5	10	1.0	-	-
P0334.06-10-010	6	10	1.0	-	-
P0334.07-10-010	7	10	1.0	-	-
P0334.08-12-010	8	12	1.0	M 8 x 1,0	-
P0334.09-14-010	9	14	1.0	-	-
P0334.10-14-010	10	14	1.0	M10 x 1,0	G1/8"
P0334.10-15-010	10	15	1.0	M10 x 1,0	-
P0334.10-16-010	10	16	1.0	M10 x 1,0	-
P0334.12-16-010	12	16	1.0	M12 x 1,5	-
P0334.14-18-010	14	18	1.0	M14 x 1,5	G1/4"
P0334.14-20-010	14	20	1.0	-	-
P0334.15-20-010	15	20	1.0	-	-
P0334.06-10-015	6	10	1.5	-	-
P0334.08-14-015	8	14	1.5	M 8 x 1,0	-
P0334.09-14-015	9	14	1.5	M10 x 1,0	-
P0334.10-14-015	10	14	1.5	M10 x 1,0	G1/8"
P0334.10-16-015	10	16	1.5	M10 x 1,0	-
P0334.10-20-015	10	20	1.5	-	-
P0334.11-17-015	11	17	1.5	-	-
P0334.12-16-015	12	16	1.5	M12 x 1,5	-
P0334.12-17-015	12	17	1.5	-	-
P0334.12-18-015	12	18	1.5	-	-
P0334.12-20-015	12	20	1.5	-	-
P0334.13-18-015	13	18	1.5	-	-
P0334.14-18-015	14	18	1.5	M14 x 1,5	G1/4"
P0334.14-20-015	14	20	1.5	-	-
P0334.14-22-015	14	22	1.5	-	-
P0334.15-20-015	15	20	1.5	-	-
P0334.16-20-015	16	20	1.5	M16 x 1,5	-
P0334.16-22-015	16	22	1.5	-	-
P0334.17-21-015	17	21	1.5	-	G3/8"
P0334.17-22-015	17	22	1.5	-	-
P0334.18-24-015	18	24	1.5	M18 x 1,5	-
P0334.20-24-015	20	24	1.5	M20 x 1,5	-
P0334.20-26-015	20	26	1.5	-	-

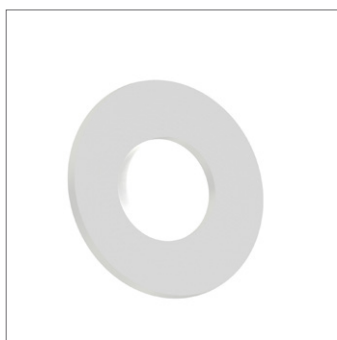
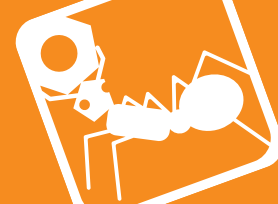


Sealing Rings copper

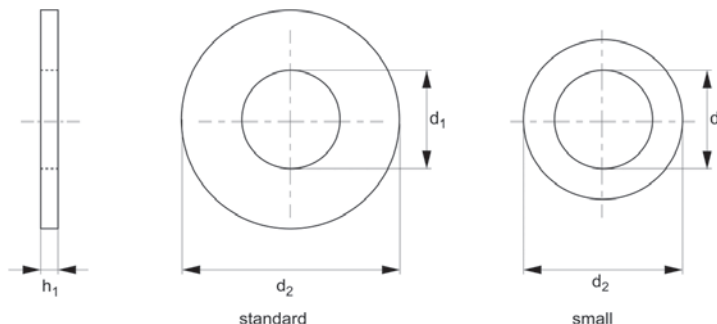
Flat Washers



Order No.	d ₁	d ₂	h ₁	Suitable for DIN 908 thread	Suitable for pipe thread
P0334.21-26-015	21	26	1.5	-	G1/2"
P0334.21-28-015	21	28	1.5	-	-
P0334.22-27-015	22	27	1.5	M22 x 1,5	-
P0334.22-29-015	22	29	1.5	-	-
P0334.10-19-020	10	19	2.0	-	-
P0334.13-18-020	13	18	2.0	-	-
P0334.14-18-020	14	18	2.0	M14 x 1,5	G1/4"
P0334.14-20-020	14	20	2.0	-	-
P0334.15-20-020	15	20	2.0	-	-
P0334.16-20-020	16	20	2.0	M16 x 1,5	-
P0334.16-21-020	16	21	2.0	-	-
P0334.16-22-020	16	22	2.0	-	-
P0334.17-24-020	17	24	2.0	-	-
P0334.18-24-020	18	24	2.0	M18 x 1,5	-
P0334.19-26-020	19	26	2.0	-	-
P0334.20-24-020	20	24	2.0	M20 x 1,5	-
P0334.21-26-020	21	26	2.0	-	G1/2"
P0334.21-28-020	21	28	2.0	-	-
P0334.22-26-020	22	26	2.0	M22 x 1,5	-
P0334.22-29-020	22	29	2.0	-	-
P0334.24-30-020	24	30	2.0	M24 x 1,5	-
P0334.24-32-020	24	32	2.0	-	-
P0334.26-32-020	26	32	2.0	M26 x 1,5	G3/4"
P0334.26-33-020	26	33	2.0	-	-
P0334.26-34-020	26	34	2.0	-	-
P0334.28-34-020	28	34	2.0	-	-
P0334.30-36-020	30	36	2.0	M30 x 1,5	G7/8"
P0334.30-38-020	30	38	2.0	-	-
P0334.32-38-020	32	38	2.0	-	-
P0334.32-40-020	32	40	2.0	-	-
P0334.33-39-020	33	39	2.0	-	G1"
P0334.35-45-020	35	45	2.0	-	-
P0334.36-42-020	36	42	2.0	M36 x 2,0	G1-1/8"
P0334.38-44-020	38	44	2.0	M38 x 2,0	-
P0334.40-47-020	40	47	2.0	-	-
P0334.42-49-020	42	49	2.0	M42 x 2	G1-1/4"
P0334.45-52-020	45	52	2.0	-	-
P0334.48-55-020	48	55	2.0	M48 x 2	G1-1/2"
P0334.50-57-020	50	57	2.0	-	-



P0339



Material
Polyamide.

diameter).
Type 2 - to DIN 125, without chamfer.

Technical Notes

Type 1 - to DIN 9021, ISO 7093 (3x thread

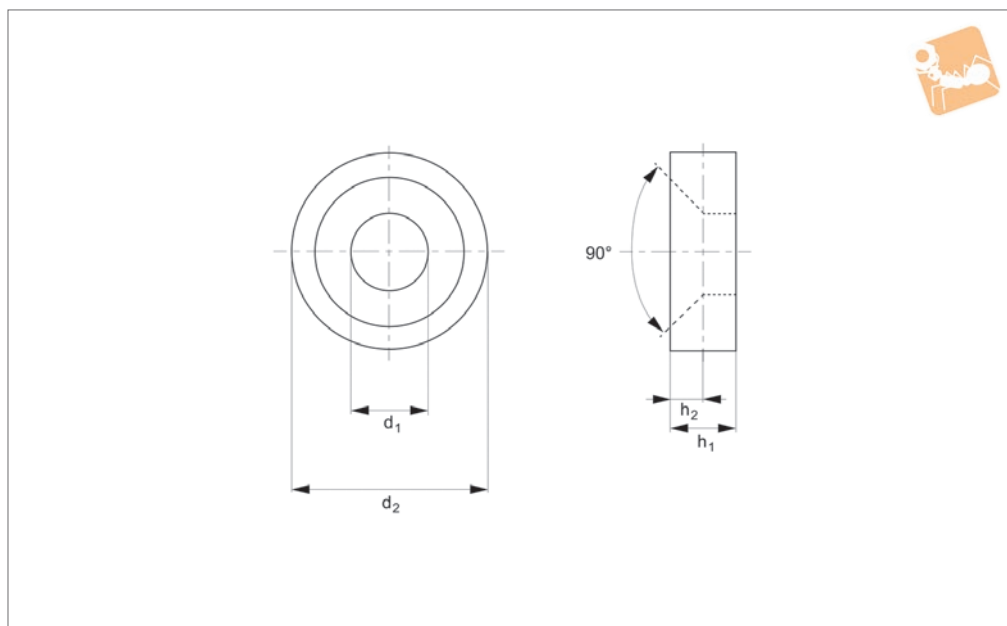
Order No.	For thread	Type	d ₁	d ₂	h ₁ min.
P0339.030-009	M 3	Standard	3.2	9	0.8
P0339.040-012	M 4	Standard	4.3	12	0.8
P0339.050-015	M 5	Standard	5.3	15	1.0
P0339.060-018	M 6	Standard	6.4	18	1.5
P0339.080-024	M 8	Standard	8.4	24	2.0
P0339.100-030	M10	Standard	10.5	30	2.5
P0339.120-037	M12	Standard	13.0	37	3.0
P0339.160-050	M16	Standard	17.0	50	3.0
P0339.180-056	M18	Standard	20.0	56	4.0
P0339.200-060	M20	Standard	22.0	60	4.0
P0339.240-072	M24	Standard	26.0	72	5.0
P0339.300-092	M30	Standard	33.0	92	6.0
P0339.360-110	M36	Standard	39.0	110	8.0
P0339.020-005	M 2	Small	2.2	5	0.3
P0339.025-006	M2,5	Small	2.7	6	0.5
P0339.030-007	M 3	Small	3.2	7	0.5
P0339.040-009	M 4	Small	4.3	9	0.8
P0339.050-010	M 5	Small	5.3	10	1.0
P0339.060-012	M 6	Small	6.4	12	1.6
P0339.080-016	M 8	Small	8.4	16	1.6
P0339.100-020	M10	Small	10.5	20	2.0
P0339.120-024	M12	Small	13.0	24	2.5
P0339.140-028	M14	Small	15.0	28	2.5
P0339.160-030	M16	Small	17.0	30	3.0
P0339.180-034	M18	Small	19.0	34	3.0
P0339.200-037	M20	Small	21.0	37	3.0
P0339.240-044	M24	Small	25.0	44	4.0
P0339.270-050	M27	Small	28.0	50	4.0
P0339.300-086	M30	Small	31.0	56	4.0



Solid Countersunk Washers

303 stainless

Flat Washers



P0341.A2

FLAT WASHERS

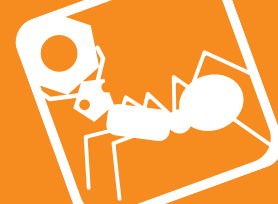
Material

Stainless steel (AISI 303, 1.4305).

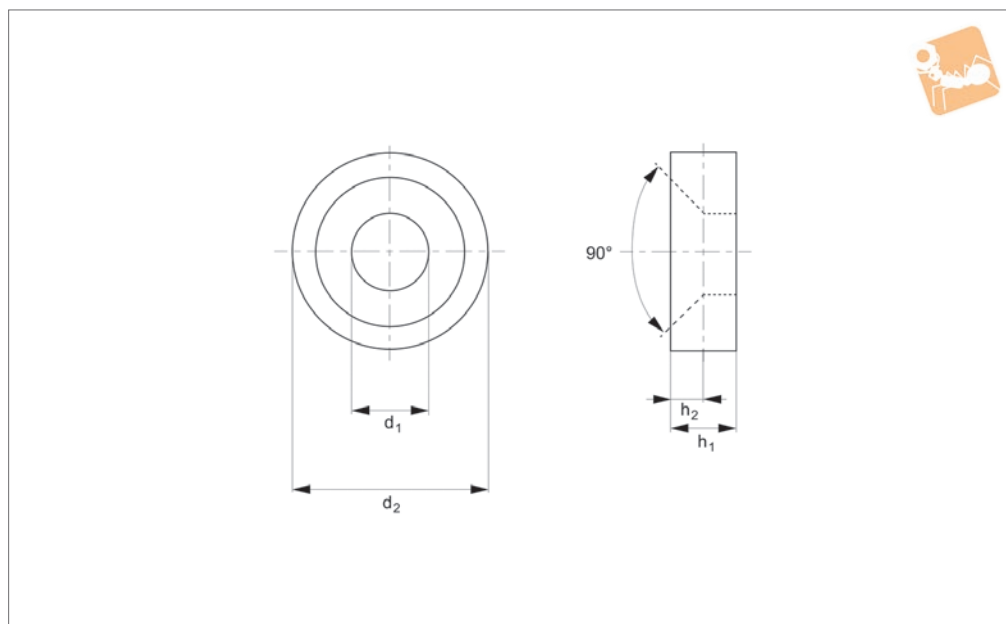
Technical Notes

Machined washers made from stainless steel to fit countersunk screws.

Order No.	For thread	d_1 $+0.3 \mid +0.1$	d_2 $+0 \mid -0.2$	h_1 ± 0.1	h_2 ± 0.1
P0341.025-025-A2	M 2,5	2.8	8	2.5	1.8
P0341.025-030-A2	M 2,5	2.8	8	3.0	1.8
P0341.025-040-A2	M 2,5	2.8	8	4.0	1.8
P0341.030-025-A2	M 3	3.5	10	2.5	2.0
P0341.030-030-A2	M 3	3.5	10	3.0	2.0
P0341.030-040-A2	M 3	3.5	10	4.0	2.0
P0341.030-050-A2	M 3	3.5	10	5.0	2.0
P0341.040-025-A2	M 4	4.5	14	2.5	2.7
P0341.040-030-A2	M 4	4.5	14	3.0	2.7
P0341.040-040-A2	M 4	4.5	14	4.0	2.7
P0341.040-050-A2	M 4	4.5	14	5.0	2.7
P0341.050-030-A2	M 5	5.5	16	3.0	3.5
P0341.050-040-A2	M 5	5.5	16	4.0	3.5
P0341.050-050-A2	M 5	5.5	16	5.0	3.5
P0341.050-060-A2	M 5	5.5	16	6.0	3.5
P0341.050-080-A2	M 5	5.5	16	8.0	3.5
P0341.060-035-A2	M 6	6.6	20	3.5	4.0
P0341.060-040-A2	M 6	6.6	20	4.0	4.0
P0341.060-050-A2	M 6	6.6	20	5.0	4.0
P0341.060-060-A2	M 6	6.6	20	6.0	4.0
P0341.060-080-A2	M 6	6.6	20	8.0	4.0
P0341.080-035-A2	M 8	8.4	20	3.5	5.2
P0341.080-040-A2	M 8	8.4	20	4.0	5.2
P0341.080-050-A2	M 8	8.4	20	5.0	5.2
P0341.080-060-A2	M 8	8.4	20	6.0	5.2
P0341.080-080-A2	M 8	8.4	20	8.0	5.2



P0341.B2



Material

Stainless steel (AISI 303 series, 1.4305),
black oxide finish.

Technical Notes

Machined washers made from stainless
steel to fit countersunk screws.

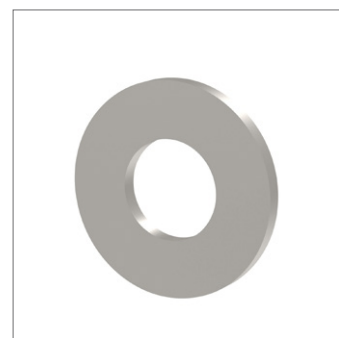
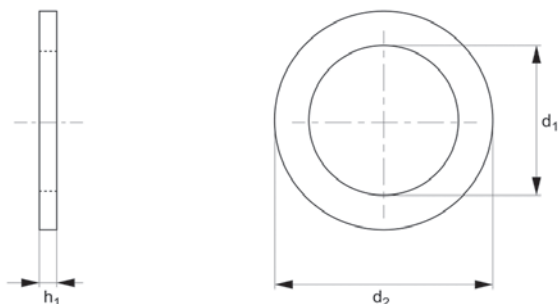
Order No.	For thread	d_1 $+0.3 \mid +0.1$	d_2 $+0 \mid -0.2$	h_1 ± 0.1	h_2 ± 0.1
P0341.025-025-B2	M 2,5	2.8	8	2.5	1.8
P0341.025-030-B2	M 2,5	2.8	8	3.0	1.8
P0341.025-040-B2	M 2,5	2.8	8	4.0	1.8
P0341.030-025-B2	M 3	3.5	10	2.5	2.0
P0341.030-030-B2	M 3	3.5	10	3.0	2.0
P0341.030-040-B2	M 3	3.5	10	4.0	2.0
P0341.030-050-B2	M 3	3.5	10	5.0	2.0
P0341.040-025-B2	M 4	4.5	14	2.5	2.7
P0341.040-030-B2	M 4	4.5	14	3.0	2.7
P0341.040-040-B2	M 4	4.5	14	4.0	2.7
P0341.040-050-B2	M 4	4.5	14	5.0	2.7
P0341.050-030-B2	M 5	5.5	16	3.0	3.5
P0341.050-040-B2	M 5	5.5	16	4.0	3.5
P0341.050-050-B2	M 5	5.5	16	5.0	3.5
P0341.050-060-B2	M 5	5.5	16	6.0	3.5
P0341.050-080-B2	M 5	5.5	16	8.0	3.5
P0341.060-035-B2	M 6	6.6	20	3.5	4.0
P0341.060-040-B2	M 6	6.6	20	4.0	4.0
P0341.060-050-B2	M 6	6.6	20	5.0	4.0
P0341.060-060-B2	M 6	6.6	20	6.0	4.0
P0341.060-080-B2	M 6	6.6	20	8.0	4.0
P0341.080-035-B2	M 8	8.4	20	3.5	5.2
P0341.080-040-B2	M 8	8.4	20	4.0	5.2
P0341.080-050-B2	M 8	8.4	20	5.0	5.2
P0341.080-060-B2	M 8	8.4	20	6.0	5.2
P0341.080-080-B2	M 8	8.4	20	8.0	5.2



Shim Washers

304 stainless

Flat Washers



P0342.A2

FLAT WASHERS

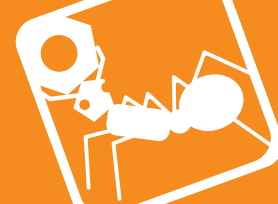
Material

Stainless steel (A2, AISI 304).

Technical Notes

To DIN 988.

Order No.	d ₁ tol. D12	d ₂ tol. d12	h ₁ -0.05
P0342.03-06-01	3.0	6.0	0.1
P0342.03-06-02	3.0	6.0	0.2
P0342.03-06-03	3.0	6.0	0.3
P0342.03-06-04	3.0	6.0	0.4
P0342.03-06-05	3.0	6.0	0.5
P0342.04-08-01	4.0	8.0	0.1
P0342.04-08-02	4.0	8.0	0.2
P0342.04-08-03	4.0	8.0	0.3
P0342.04-08-05	4.0	8.0	0.5
P0342.04-08-10	4.0	8.0	1.0
P0342.05-10-02	5.0	10.0	0.2
P0342.05-10-03	5.0	10.0	0.3
P0342.05-10-05	5.0	10.0	0.5
P0342.05-10-10	5.0	10.0	1.0
P0342.05-10-01	5.0	10.0	0.1
P0342.06-12-01	6.0	12.0	0.1
P0342.06-12-03	6.0	12.0	0.3
P0342.06-12-02	6.0	12.0	0.2
P0342.06-12-05	6.0	12.0	0.5
P0342.06-12-10	6.0	12.0	1.0
P0342.08-14-01	8.0	14.0	0.1
P0342.08-14-02	8.0	14.0	0.2
P0342.08-14-03	8.0	14.0	0.3
P0342.08-14-05	8.0	14.0	0.5
P0342.08-14-10	8.0	14.0	1.0
P0342.10-16-02	10.0	16.0	0.2
P0342.10-16-05	10.0	16.0	0.5
P0342.10-16-10	10.0	16.0	1.0
P0342.10-16-01	10.0	16.0	0.1
P0342.10-16-03	10.0	16.0	0.3
P0342.12-18-01	12.0	18.0	0.1
P0342.12-18-02	12.0	18.0	0.2
P0342.12-18-03	12.0	18.0	0.3
P0342.12-18-05	12.0	18.0	0.5



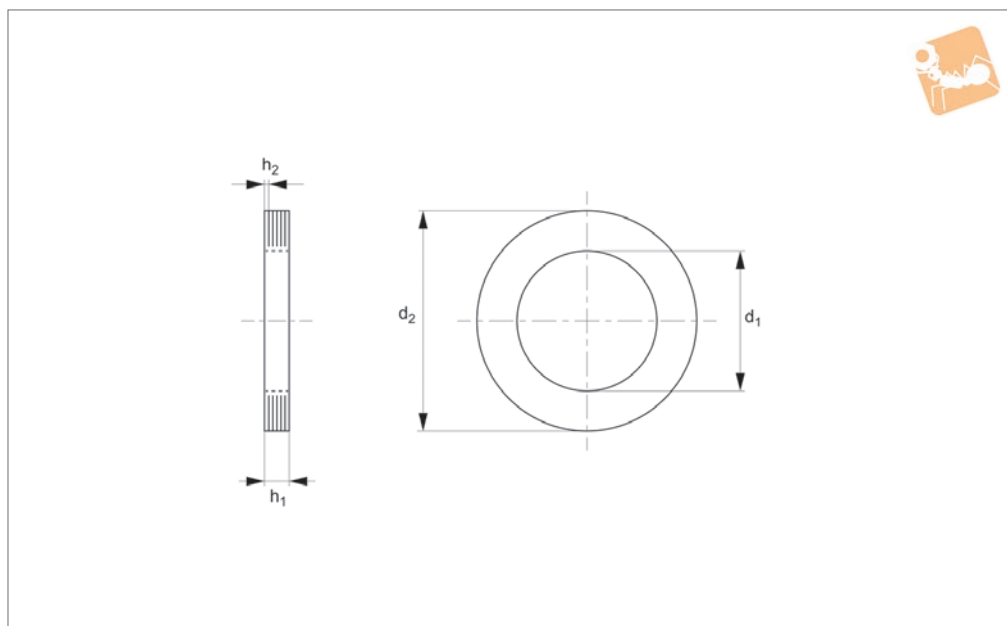
Order No.	d_1 tol. $\bar{D}12$	d_2 tol. $\bar{d}12$	h_1 -0.05
P0342.12-18-10	12.0	18.0	1.0
P0342.14-20-01	14.0	20.0	0.1
P0342.14-20-02	14.0	20.0	0.2
P0342.14-20-03	14.0	20.0	0.3
P0342.14-20-05	14.0	20.0	0.5
P0342.14-20-10	14.0	20.0	1.0
P0342.15-21-01	15.0	21.0	0.1
P0342.15-21-02	15.0	21.0	0.2
P0342.15-21-03	15.0	21.0	0.3
P0342.15-21-05	15.0	21.0	0.5
P0342.15-21-10	15.0	21.0	1.0
P0342.15-21-20	15.0	21.0	2.0
P0342.15-22-05	15.0	22.0	0.5
P0342.15-22-10	15.0	22.0	1.0
P0342.16-22-01	16.0	22.0	0.1
P0342.16-22-02	16.0	22.0	0.2
P0342.16-22-03	16.0	22.0	0.3
P0342.16-22-05	16.0	22.0	0.5
P0342.16-22-10	16.0	22.0	1.0
P0342.17-24-03	17.0	24.0	0.3
P0342.17-24-05	17.0	24.0	0.5
P0342.17-24-10	17.0	24.0	1.0
P0342.17-24-15	17.0	24.0	1.5
P0342.18-25-02	18.0	25.0	0.2
P0342.18-25-03	18.0	25.0	0.3
P0342.18-25-10	18.0	25.0	1.0
P0342.20-28-01	20.0	28.0	0.1
P0342.20-28-02	20.0	28.0	0.2
P0342.20-28-03	20.0	28.0	0.3
P0342.20-28-05	20.0	28.0	0.5
P0342.20-28-10	20.0	28.0	1.0
P0342.22-30-01	22.0	30.0	0.1
P0342.22-30-05	22.0	30.0	0.5
P0342.25-35-01	25.0	35.0	0.1
P0342.25-35-02	25.0	35.0	0.2
P0342.25-35-03	25.0	35.0	0.3
P0342.25-35-05	25.0	35.0	0.5
P0342.25-35-10	25.0	35.0	1.0
P0342.25-35-15	25.0	35.0	1.5
P0342.28-40-01	28.0	40.0	0.1
P0342.28-40-05	28.0	40.0	0.5
P0342.30-42-01	30.0	42.0	0.1
P0342.30-42-05	30.0	42.0	0.5
P0342.30-42-10	30.0	42.0	1.0
P0342.35-45-03	35.0	45.0	0.3
P0342.35-45-05	35.0	45.0	0.5
P0342.35-45-10	35.0	45.0	1.0
P0342.40-50-01	40.0	50.0	0.1
P0342.40-50-05	40.0	50.0	0.5
P0342.40-50-10	40.0	50.0	1.0
P0342.50-62-02	50.0	62.0	0.2



Laminated Shim Spacers

brass

Flat Washers



P0344.BR

FLAT WASHERS

Material

Brass, with 0,05mm laminations.

Technical Notes

The inner race spacers fits onto shafts and

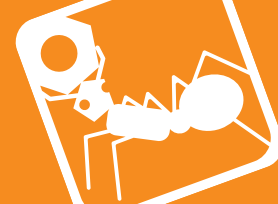
preloads inner race of ball bearing.

The outer race fits into the housing and preloads outer race of ball bearing.

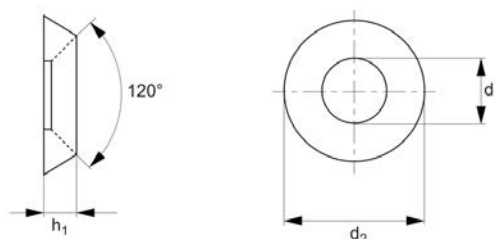
Tips

The laminations can be peeled off as required.

Order No.	For shaft	d_1 ± 0.1	d_2 $+0.0/-0.1$	h_1 ± 0.1	h_2
P0344.030-I	3	3.2	5.9	0.8	0.05
P0344.050-I	5	5.2	9.5	0.8	0.05
P0344.060-I	6	6.2	12.7	0.8	0.05
P0344.100-I	10	10.2	15.9	0.8	0.05
P0344.100-O	10	7.9	10.0	0.8	0.05
P0344.130-O	13	9.5	13.0	0.8	0.05



P0346



Material

Stainless steel (A2 AISI 303 or A4 AISI 316).

Order No.	For	d ₁	d ₂	h ₁	Material
P0346.030-A2	M 3	3	9	2.0	A2 s/s
P0346.040-A2	M 4	4	11	2.5	A2 s/s
P0346.050-A2	M 5	5	14	3.0	A2 s/s
P0346.060-A2	M 6	6	16	3.5	A2 s/s
P0346.080-A2	M 8	8	22	4.5	A2 s/s
P0346.100-A2	M10	10	28	5.5	A2 s/s
P0346.030-A4	M 3	3	9	2.0	A4 s/s
P0346.040-A4	M 4	4	11	2.5	A4 s/s
P0346.050-A4	M 5	5	14	3.0	A4 s/s
P0346.060-A4	M 6	6	16	3.5	A4 s/s
P0346.080-A4	M 8	8	22	4.5	A4 s/s
P0346.100-A4	M10	10	28	5.5	A4 s/s