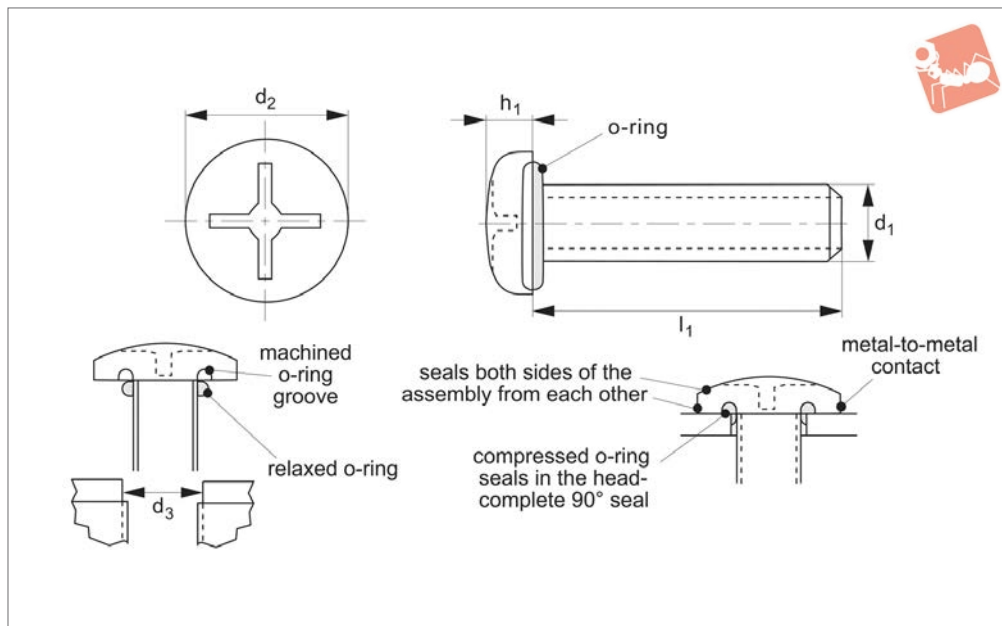




# Pan Head Seal Screws phillips drive



## Sealing Screws



**36630**

SEALING SCREWS

### Material

Stainless steel (AISI 303 1.4305 tensile strength 550 N/mm<sup>2</sup>), with silicone „O“ ring as standard.

For other „O“ ring materials see technical data pages

(-FS = fluorosilicone, -EP = EPDM, -VI = viton, -NI = nitrile, -BN = Buna etc.).

Other thread lengths, and stainless steel

A4 (AISI 316) on request.

### Technical Notes

Seals substances in and contaminants out, screws generally as DIN 7985 H, ISO 7045. Max temperature range: -100°C to +260°C, pressure range - up to 410 bar (6000 psi). Re-usable, also available (on request) with thread-locking.

### Tips

Clearance holes recommended for maximum sealing performance (see dimensions below).

Clearance hole depth 2-3 x thread pitch, threads are metric coarse pitch.

Order No.	d <sub>1</sub>	l <sub>1</sub>	h <sub>1</sub> max.	d <sub>2</sub> max.	d <sub>3</sub> ±0.05	Drive
36630.W0204	M 2	4	1.6	4.0	2.35	PH-1
36630.W0208	M 2	8	1.6	4.0	2.35	PH-1
36630.W0210	M 2	10	1.6	4.0	2.35	PH-1
36630.W0212	M 2	12	1.6	4.0	2.35	PH-1
36630.W0251	M2,5	6	2.1	4.7	2.75	PH-1
36630.W0252	M2,5	8	2.1	4.7	2.75	PH-1
36630.W0253	M2,5	10	2.1	4.7	2.75	PH-1
36630.W0254	M2,5	12	2.1	4.7	2.75	PH-1
36630.W0306	M 3	6	2.4	6.0	3.6	PH-1
36630.W0308	M 3	8	2.4	6.0	3.6	PH-1
36630.W0310	M 3	10	2.4	6.0	3.6	PH-1
36630.W0312	M 3	12	2.4	6.0	3.6	PH-1
36630.W0320	M 3	20	2.4	6.0	3.6	PH-1
36630.SP0335SI	M 3	35	2.4	6.0	3.6	PH-1
36630.W0406	M 4	6	3.1	8.0	4.5	PH-2
36630.W0408	M 4	8	3.1	8.0	4.5	PH-2
36630.W0410	M 4	10	3.1	8.0	4.5	PH-2
36630.W0412	M 4	12	3.1	8.0	4.5	PH-2
36630.W0416	M 4	16	3.1	8.0	4.5	PH-2
36630.W0420	M 4	20	3.1	8.0	4.5	PH-2
36630.W0508	M 5	8	3.7	10.0	5.6	PH-2
36630.W0510	M 5	10	3.7	10.0	5.6	PH-2
36630.W0512	M 5	12	3.7	10.0	5.6	PH-2
36630.W0516	M 5	16	3.7	10.0	5.6	PH-2
36630.W0520	M 5	20	1.6	10.0	5.6	PH-2
36630.W0612	M 6	12	4.6	12.0	6.8	PH-3
36630.W0616	M 6	16	4.6	12.0	6.8	PH-3
36630.W0620	M 6	20	4.6	12.0	6.8	PH-3



Order No.	d <sub>1</sub>	l <sub>1</sub>	h <sub>1</sub> max.	d <sub>2</sub> max.	d <sub>3</sub> ±0.05	Drive
36630.W0625	M 6	25	4.6	12.0	6.8	PH-3
36630.W0630	M 6	30	4.6	12.0	6.8	PH-3
36630.W0812	M 8	12	6.0	16.0	8.5	PH-4
36630.W0816	M 8	16	6.0	16.0	8.5	PH-4
36630.W0820	M 8	20	6.0	16.0	8.5	PH-4
36630.W0825	M 8	25	6.0	16.0	8.5	PH-4
36630.W0830	M 8	30	6.0	16.0	8.5	PH-4
36630.W1016	M10	16	7.5	20.0	10.6	PH-4
36630.W1020	M10	20	7.5	20.0	10.6	PH-4
36630.W1025	M10	25	7.5	20.0	10.6	PH-4
36630.W1030	M10	30	7.5	20.0	10.6	PH-4
36630.W1040	M10	40	7.5	20.0	10.6	PH-4

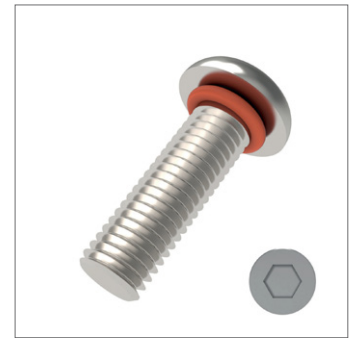
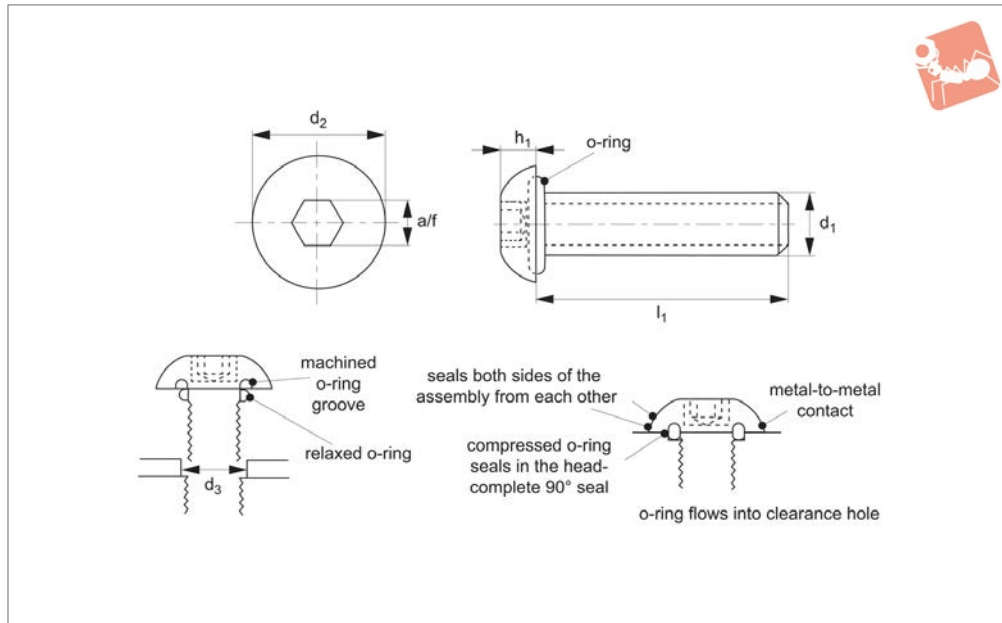


# Button Head Seal Screws

hex. socket



## Sealing Screws



**36631**

SEALING SCREWS

### Material

Stainless steel (AISI 303 1.4305 tensile strength 550 N/mm<sup>2</sup> or AISI 316 1.440 tensile strength 480 N/mm<sup>2</sup>), with silicone „O“ ring as standard.  
For other „O“ ring materials see technical data pages  
(-FS = fluorosilicone, -EP = EPDM, -VI = viton, -NI = nitrile, -BN = Buna etc.).

Other thread lengths on request.

### Technical Notes

Screws generally as ISO 7380, seals substances in and contaminants out.  
Re-useable. Clearance holes recommended for maximum sealing.  
Max temperature range: -100°C to +260°C, pressure range - up to 410 bar (6000 psi).

Also available (on request) with thread-locking.

### Tips

Clearance holes recommended for maximum sealing performance (see dimensions below).  
Clearance hole depth 2-3 x thread pitch, threads are metric coarse pitch.

Order No.	d <sub>1</sub>	l <sub>1</sub>	h <sub>1</sub> max.	d <sub>2</sub> max.	A/F	d <sub>3</sub> ±0.05	Material
36631.W0306	M 3	6	1.7	5.7	2	3.6	A2 s/s
36631.W0308	M 3	8	1.7	5.7	2	3.6	A2 s/s
36631.W0310	M 3	10	1.7	5.7	2	3.6	A2 s/s
36631.W0312	M 3	12	1.7	5.7	2	3.6	A2 s/s
36631.W0320	M 3	20	1.7	5.7	2	3.6	A2 s/s
36631.W0406	M 4	6	2.2	7.6	2.5	4.5	A2 s/s
36631.W0408	M 4	8	2.2	7.6	2.5	4.5	A2 s/s
36631.W0410	M 4	10	2.2	7.6	2.5	4.5	A2 s/s
36631.W0412	M 4	12	2.2	7.6	2.5	4.5	A2 s/s
36631.W0416	M 4	16	2.2	7.6	2.5	4.5	A2 s/s
36631.W0420	M 4	20	2.2	7.6	2.5	4.5	A2 s/s
36631.W0508	M 5	8	2.8	9.5	3	5.6	A2 s/s
36631.W0510	M 5	10	2.8	9.5	3	5.6	A2 s/s
36631.W0512	M 5	12	2.8	9.5	3	5.6	A2 s/s
36631.W0516	M 5	16	2.8	9.5	3	5.6	A2 s/s
36631.W0520	M 5	20	2.8	9.5	3	5.6	A2 s/s
36631.W0612	M 6	12	3.3	10.5	4	6.8	A2 s/s
36631.W0616	M 6	16	3.3	10.5	4	6.8	A2 s/s
36631.W0620	M 6	20	3.3	10.5	4	6.8	A2 s/s
36631.W0625	M 6	25	3.3	10.5	4	6.8	A2 s/s
36631.W0630	M 6	30	3.3	10.5	4	6.8	A2 s/s
36631.W0812	M 8	12	4.4	14.0	5	8.5	A2 s/s
36631.W0816	M 8	16	4.4	14.0	5	8.5	A2 s/s
36631.W0820	M 8	20	4.4	14.0	5	8.5	A2 s/s
36631.W0825	M 8	25	4.4	14.0	5	8.5	A2 s/s
36631.W0830	M 8	30	4.4	14.0	5	8.5	A2 s/s
36631.W1016	M10	16	5.5	17.5	6	10.6	A2 s/s
36631.W1020	M10	20	5.5	17.5	6	10.6	A2 s/s

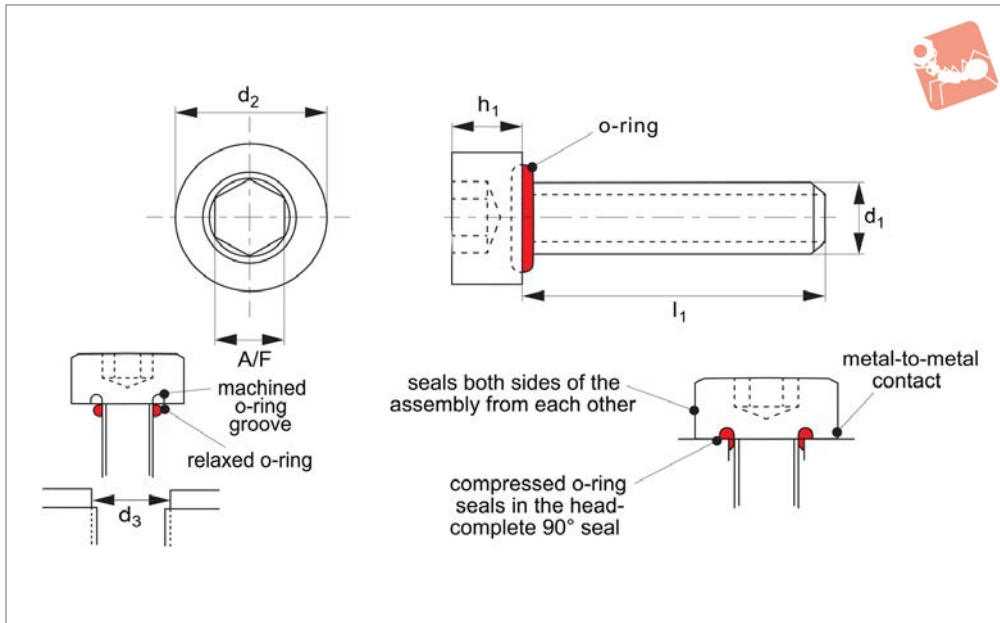


Order No.	d <sub>1</sub>	l <sub>1</sub>	h <sub>1</sub> max.	d <sub>2</sub> max.	A/F	d <sub>3</sub> ±0.05	Material
<b>36631.W1025</b>	M10	25	5.5	17.5	6	10.6	A2 s/s
<b>36631.W1030</b>	M10	30	5.5	17.5	6	10.6	A2 s/s
<b>36631.W1040</b>	M10	40	5.5	17.5	6	10.6	A2 s/s
<b>36631.W1220</b>	M12	20	6.6	21.0	8	12.9	A2 s/s
<b>36631.W1225</b>	M12	25	6.6	21.0	8	12.9	A2 s/s
<b>36631.W1230</b>	M12	30	6.6	21.0	8	12.9	A2 s/s
<b>36631.W1240</b>	M12	40	6.6	21.0	8	12.9	A2 s/s
<b>36631.W1250</b>	M12	50	6.6	21.0	8	12.9	A2 s/s
<b>36631.W0406-A4</b>	M 4	6	2.2	7.6	2.5	4.5	A4 s/s

# Cap Head Seal Screws

hex. socket

## Sealing Screws



### 36633

SEALING SCREWS

#### Material

Stainless steel (AISI 303 1.4305 tensile strength 550 N/mm<sup>2</sup> or AISI 316 1.440 tensile strength 480 N/mm<sup>2</sup>), with silicone „O“ ring as standard.  
For other „O“ ring materials see technical data pages (-FS = fluorosilicone, -EP = EPDM, -VI = viton, -NI = nitrile, -BN = Buna etc.).

Other thread lengths on request.

#### Technical Notes

Screws generally as DIN 912, seals substances in and contaminants out  
Re-useable, clearance holes recommended for maximum sealing.  
Max temperature range: -100°C to +260°C, pressure range - up to 410 bar (6000 psi).

Also available (on request) with thread-locking.

#### Tips

Clearance holes recommended for maximum sealing performance (see dimensions below).  
Clearance hole depth 2-3 x thread pitch, threads are metric coarse pitch.

Order No.	d <sub>1</sub>	l <sub>1</sub>	h <sub>1</sub> max.	d <sub>2</sub> max.	A/F	d <sub>3</sub> ±0.05	Material
36633.W0306	M 3	6	3.0	5.5	2.5	3.6	A2 s/s
36633.W0308	M 3	8	3.0	5.5	2.5	3.6	A2 s/s
36633.W0310	M 3	10	3.0	5.5	2.5	3.6	A2 s/s
36633.W0312	M 3	12	3.0	5.5	2.5	3.6	A2 s/s
36633.W0320	M 3	20	3.0	5.5	2.5	3.6	A2 s/s
36633.W0406	M 4	6	4.0	7.0	3.0	4.5	A2 s/s
36633.W0408	M 4	8	4.0	7.0	3.0	4.5	A2 s/s
36633.W0410	M 4	10	4.0	7.0	3.0	4.5	A2 s/s
36633.W0412	M 4	12	4.0	7.0	3.0	4.5	A2 s/s
36633.W0416	M 4	16	4.0	7.0	3.0	4.5	A2 s/s
36633.W0420	M 4	20	4.0	7.0	3.0	4.5	A2 s/s
36633.W0508	M 5	8	5.0	8.5	4.0	5.6	A2 s/s
36633.W0510	M 5	10	5.0	8.5	4.0	5.6	A2 s/s
36633.W0512	M 5	12	5.0	8.5	4.0	5.6	A2 s/s
36633.W0516	M 5	16	5.0	8.5	4.0	5.6	A2 s/s
36633.W0520	M 5	20	5.0	8.5	4.0	5.6	A2 s/s
36633.W0612	M 6	12	6.0	10.0	5.0	6.8	A2 s/s
36633.W0616	M 6	16	6.0	10.0	5.0	6.8	A2 s/s
36633.W0620	M 6	20	6.0	10.0	5.0	6.8	A2 s/s
36633.W0625	M 6	25	6.0	10.0	5.0	6.8	A2 s/s
36633.W0630	M 6	30	6.0	10.0	5.0	6.8	A2 s/s
36633.W0812	M 8	12	8.0	13.0	6.0	8.5	A2 s/s
36633.W0816	M 8	16	8.0	13.0	6.0	8.5	A2 s/s
36633.W0820	M 8	20	8.0	13.0	6.0	8.5	A2 s/s
36633.W0825	M 8	25	8.0	13.0	6.0	8.5	A2 s/s
36633.W0830	M 8	30	8.0	13.0	6.0	8.5	A2 s/s
36633.W1016	M10	16	10.0	16.0	8.0	10.6	A2 s/s
36633.W1020	M10	20	10.0	16.0	8.0	10.6	A2 s/s



Order No.	d <sub>1</sub>	l <sub>1</sub>	h <sub>1</sub> max.	d <sub>2</sub> max.	A/F	d <sub>3</sub> ±0.05	Material
<b>36633.W1025</b>	M10	25	10.0	16.0	8.0	10.6	A2 s/s
<b>36633.W1030</b>	M10	30	10.0	16.0	8.0	10.6	A2 s/s
<b>36633.W1040</b>	M10	40	10.0	16.0	8.0	10.6	A2 s/s
<b>36633.W1220</b>	M12	20	12.0	18.0	10.0	12.85	A2 s/s
<b>36633.W1225</b>	M12	25	12.0	18.0	10.0	12.85	A2 s/s
<b>36633.W1230</b>	M12	30	12.0	18.0	10.0	12.85	A2 s/s
<b>36633.W1240</b>	M12	40	12.0	18.0	10.0	12.85	A2 s/s
<b>36633.W1250</b>	M12	50	12.0	18.0	10.0	12.85	A2 s/s
<b>36633.W0420-A4B</b>	M 4	20	4.0	7.0	3.0	4.5	VI s/s



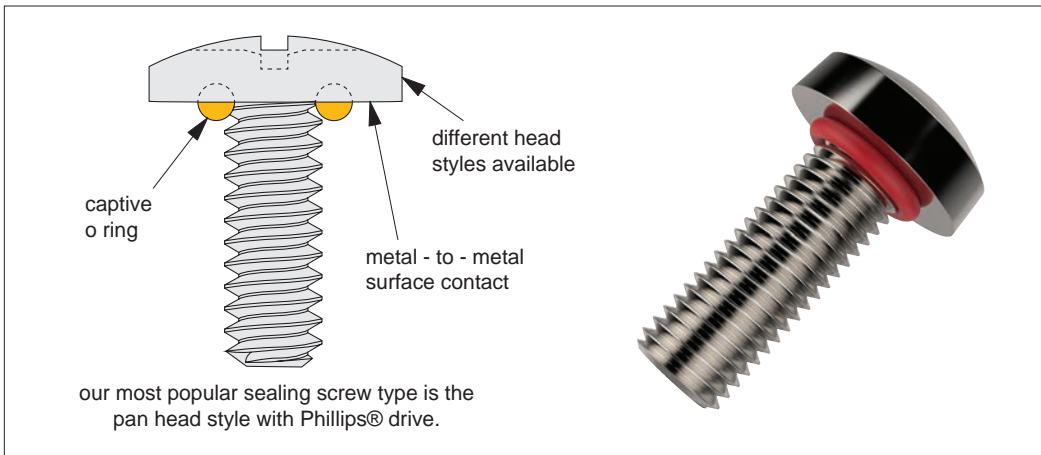
# Wixroyd Sealing Screws

why use a sealing screw?

36630 - 36636

Positioning Elements

SEALING SCREWS



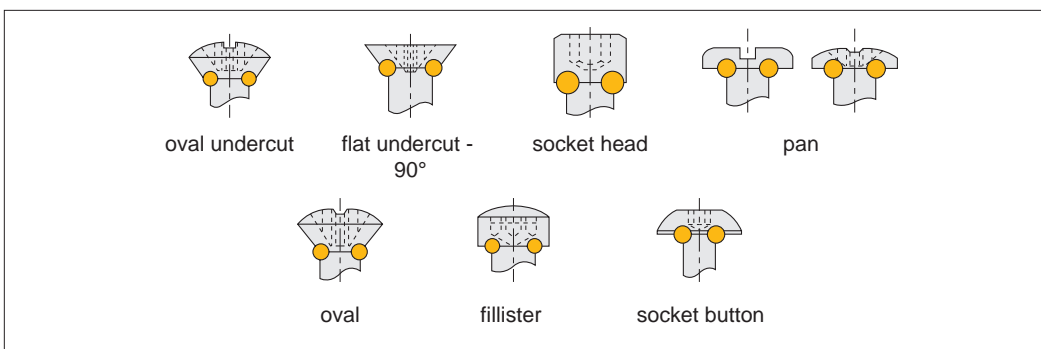
An ordinary screw lacks seal protection, allowing dirt, fluids, gases etc to infiltrate and damage sensitive devices. Sealing screws provide bi-directional sealing protection to systems where screws are used, to protect them against dirt, chemicals, water or other contaminants, which (without the screw seal), may penetrate and cause damage, or alternatively where gases and liquids may leak out.

## Why use Sealing Screws?

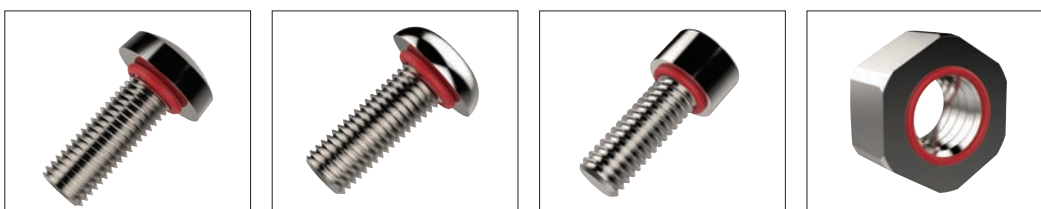
Sealing screws are designed and manufactured with a precision engineered groove beneath the head of the fastener to accommodate the integral O-ring. As the fastener is tightened, the O-ring is compressed, squeezing it between the groove and mating surface to complete the seal. The design of the groove controls the amount of compression of the O-ring, and because O-rings retain their elastic memory, the screws are reusable time after time.

The seal provides bi-directional sealing which provides a total barrier seal against internal or external conditions (water, fluids, chemicals, dirt, air, contaminants etc) which could otherwise penetrate and damage systems. The screws are very easy to use and do not need any special preparation or re-tightening.

There are a range of O-ring materials that can resist virtually all chemical and environmental conditions. We can also provide sealing screws (on request) to military specifications (MILSPEC).



## Sealing Screw Heads



## Ordering Options

**36630 - Pan head - Phillips® Security and Torx® options**

**36631 - Button Hex-head Security and Torx® options**

**36633 - Socket Head Security and Torx® options**

**36636 - Hexagon Nut**





## Optimal performance

### Self-sealing Screw

When using self-sealing screws a high pressure seal is formed along the thread's contact surface when torqued.

If possible, and to ensure maximum sealing performance, we recommend a clearance hole (see table below), this creates room for the O-ring to flow into.

The aim is to ensure full metal-to-metal contact between the underside of the fastener and the mounting surface.

If a clearance hole cannot be utilized, the O-ring will still function as it will compress to fill the gap between the male and female surfaces.

We also have a range of sealing nuts to complement our range of sealing screws. These sealing nuts often eliminate the need for gaskets, compounds and surface preparation. They are widely used in the hydraulic, pneumatic or fuel systems industries.

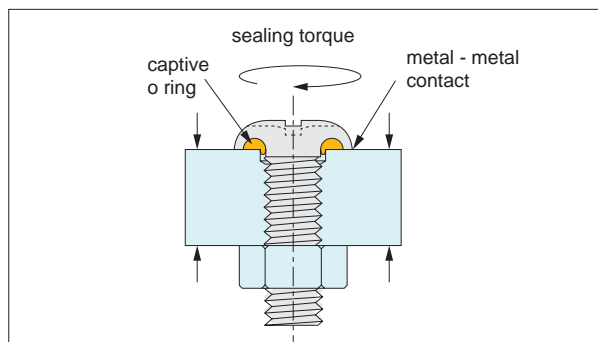
They are invaluable when a vacuum needs to be created and provide a complete seal when gaseous or liquid pressure is a factor. Domed nuts are self-sealing and provide exceptional vibration resistance.

### Applications

Some of the typical applications for our sealing screws include:

- Motors
- Cabinets and enclosures
- Sensors and instrumentation
- Internal combustion engines
- Gear pumps
- Fuel tanks
- Transmissions
- Gear boxes
- Air cylinders
- Pressure gauges
- Computer disk drives
- Motion control valves
- Missile tanks
- Wet wings

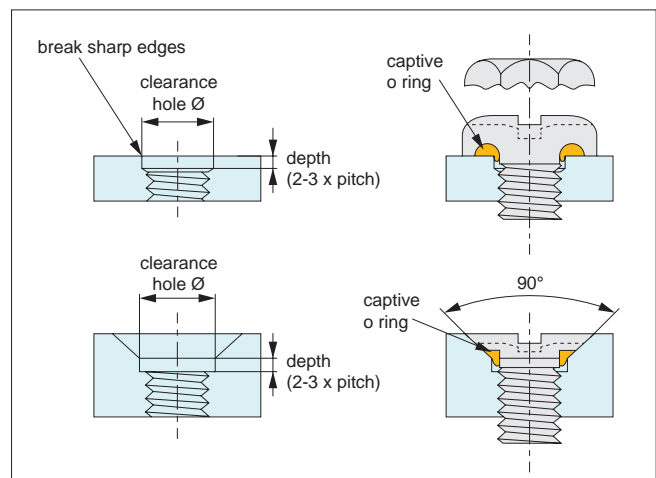
### Installation Torque



Thread Size	Standard Installation Torque
M3	0.6 Nm
M3,5	1.0 Nm
M4	2.2 Nm
M5	2.5 Nm
M6	8.5 Nm
M8	16 Nm
M10	30 Nm

### Clearance Hole Ø - Recommended

Nom. Size	Max clearance hole Ø
M2	2,44
M2,5	2,95
M3	3,45
M3,5	3,66
M4	4,55
M5	5,56
M6	6,66
M8	9,04
M10	11,05
M12	14,05
M14	16,05
M16	18,06



For optimal seal screw performance we recommend creating a clearance hole in the panel into which the O-ring can be fitted. This causes the O-ring to create a complete seal, and the clearance hole thus prevents extrusion into the metal when the screw is under pressure.

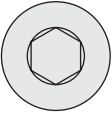

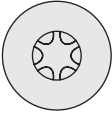





# Wixroyd Sealing Screws

## drive types and O ring selection

36630 - 36636  
Positioning Elements

Schematic	Drive Types	Uses
	Hexagonal	Ideal for precision assembly. Most recommended where less surface area is available.
	Cross Drive (Phillips®)	Most recommended drive type. Provides good control in driving. Always use a driver bit of the proper size which is in good condition.
	Hexalobular (Torx®)	Positive-engaging, fast-locating method which transmits drive torque with less required downward pressure. Good fastening appearance.
	Security	These screws are impossible to remove without the special matching screwdriver.

### Drive Types

We can provide Torx® heads and security/tamper-proof screws, as well as special threads, grooves and cross holes for safety wires, and a further range of styles such as captive screws, anti-vibration strips on the threads etc (for extreme vibration applications).

Standard O rings are red silicone, but a further five O ring material types are readily available. The main factor to consider when selecting an O ring type is the environment in which it will be placed, and the temperature range it will be subjected to.

### O ring Selection

Material	Notes
Silicone (SI)	Our standard O ring type with a wide temperature range -60°C to +200°C. Resistant to moderate or oxidising chemical, but not generally oil or solvent resistant.
Fluorosilicone (FS)	Widely used in the automotive and aerospace industries as it has excellent resistance to fuel, oil and solvents. Standard temperature range -50°C to +170°C.
EPDM (EP)	These O rings are very suited for outdoor environments and are good for weather and water resistant applications having excellent ozone, steam and chemical resistance. Temperature range -50°C to +110°C.
Viton-fluorocarbon (VI)	These seals are widely used on aircraft engines and automotive fuel handling systems as they have excellent fuel, oil and solvent resistance. Standard temperature range -50°C to +200°C
Nitrile (NI)	Widely used as highly resistant to petroleum based substances, water and alcohols. Temperature range -50°C to +110°C.

Other O rings types can include Neoprene, Buna N, Teflon etc.

SEALING SCREWS

ov-W36630-AP0170-T-W36636-AP0178-T-sealing-screws-selection-c-rmh - Updated - 28-10-2022



**Materials**

Our standard screw material is stainless steel (AISI 303, 1.4305). Other materials available are aluminium (non-magnetic and 1/3 weight of steel), brass (high electrical conductivity, non-magnetic and good corrosion resistance), titanium (low weight, very strong and highly corrosion resistant), stainless steel (A4, AISI 316).

Fasteners can be supplied to MILSPEC standards (MIL-S-82496A) on request.

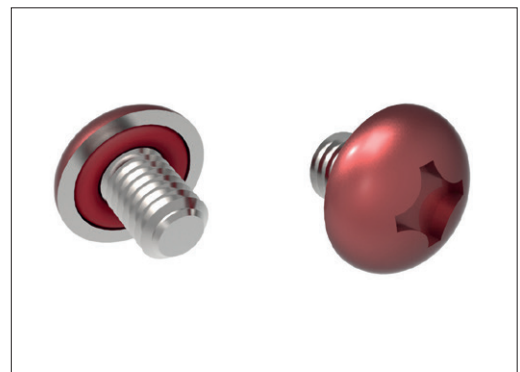
**Finishes**

Finishes are dependent on the material you are wishing to coat and subject to minimum quantities.

Finish	Notes
Black Chrome (MIL-C-1458B)	Black chrome is a hard, non-reflective coating which is resistant to abrasion, heat and erosion. The black chrome surface is a dull, dark grey and may be waxed or oiled to darken surface.
Black Oxide Coating (MIL-C-13924B)	Black oxide is a uniform black coating for ferrous metals. Generally it is considered a decorative coating and provides only very limited corrosion protection under mild corrosion conditions.
Cadmium	Cadmium is a bright, silvery white plating. Supplementary treatments for Type II can be golden, iridescent, amber, black or olive drab.
Passivate (QQ-P-35/MIL S-500SC)	Passivation is a process designed to remove foreign metals from the surface of stainless and corrosion resistant steels.
Phosphate Coating Light (TT-C-00490B)	Phosphate coating is a light coating for use as a base paint.
Gold (MIL-G-45204B)	Yellow to orange colour depending on proprietary process used. Will range from matt to bright finish depending on base metal. Good corrosion resistance and high tarnish resistance.
Nickel (QQ-N-290A)	Nickel is a corrosion protective plating for steel, zinc and zinc alloys as well as copper and copper alloys.
Zinc (QQ-Z-325C)	The primary use of chromate finishes on zinc is to retard or prevent formation of white corrosion products on zinc surfaces.



**Shoulder Screws**



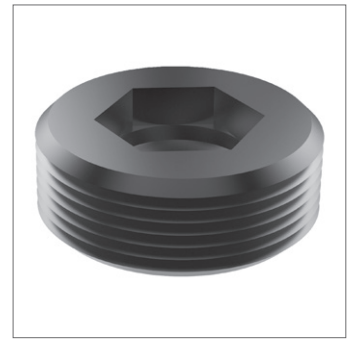
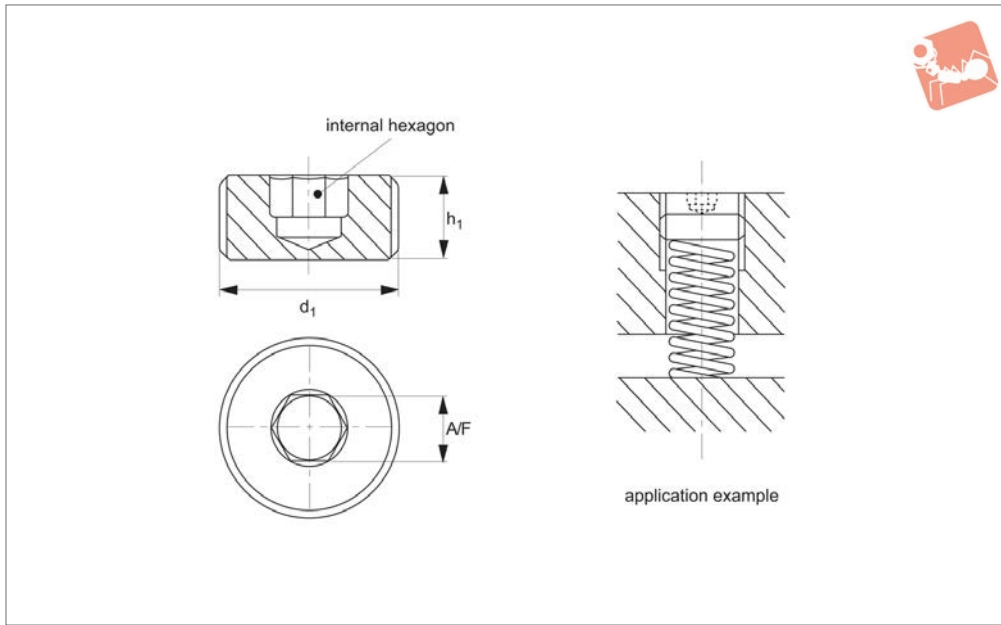
**Painted Heads**



**Captive Screws**



**Security Heads (Tamper Proof)**



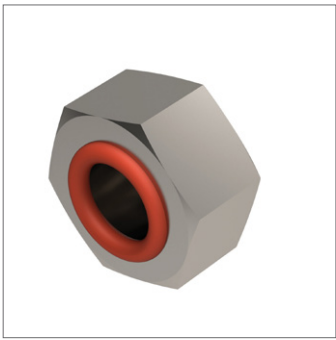
## 39200

SEALING SCREWS

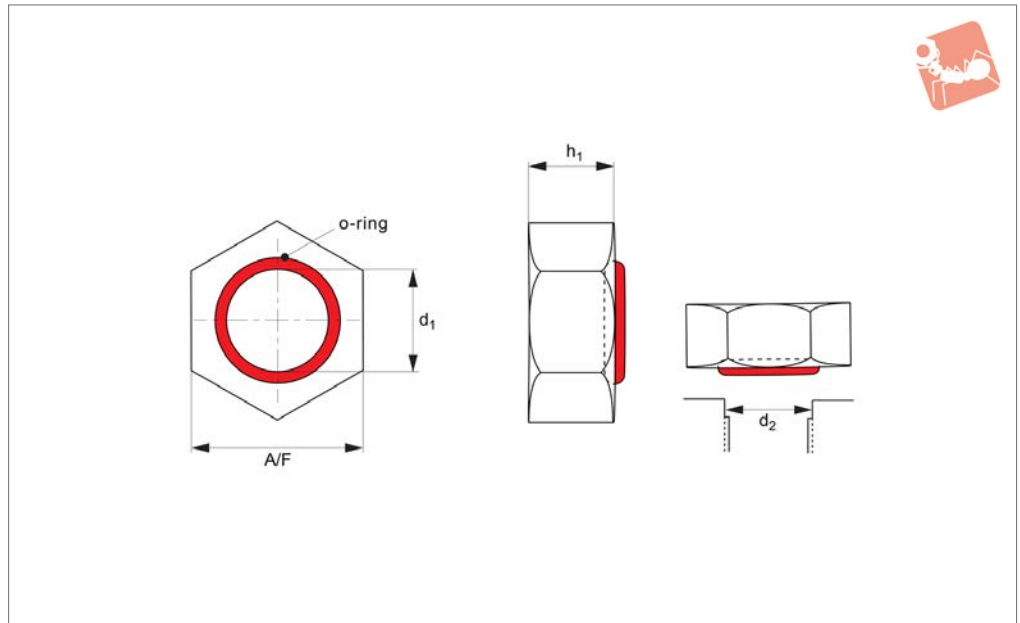
### Material

Steel, blackened. Strength class 5.8, 500 N/mm<sup>2</sup>

Order No.	$d_1$	$h_1$	A/F
39200.W0012	M12x1,5	10	6
39200.W0016	M16x1,5	10	8
39200.W0020	M20x1,5	12	10
39200.W0024	M24x1,5	12	14
39200.W0027	M27x1,5	12	14
39200.W0030	M30x1,5	12	17
39200.W0033	M33x1,5	12	17



## 36636



### Material

Stainless steel (AISI 303 1.4305 tensile strength 550 N/mm<sup>2</sup> or AISI 316 1.440 tensile strength 480 N/mm<sup>2</sup>), with silicone „O” ring as standard.  
For other „O” ring materials see technical data pages,  
(-FS = fluorosilicone, -EP = EPDM, -VI =

viton, -NI = nitrile, -BN = Buna etc.).

### Technical Notes

Seals substances in and contaminants out, re-useable.  
Max temperature range: -100°C to +260°C,  
pressure range - up to 410 bar (6000 psi).

### Tips

Clearance holes recommended for maximum sealing performance (see dimensions below).  
Clearance hole depth 2-3 x thread pitch, threads are metric coarse pitch.

Order No.	d <sub>1</sub>	A/F	d <sub>2</sub> ±0.05	h <sub>1</sub> max.	Material
36636.W0020	M 2	4	2.35	1.6	A2 s/s
36636.W0025	M2,5	5	2.75	2.0	A2 s/s
36636.W0030	M 3	5.5	3.6	2.4	A2 s/s
36636.W0040	M 4	7	4.5	3.2	A2 s/s
36636.W0050	M 5	8	5.6	4.7	A2 s/s
36636.W0060	M 6	10	6.8	5.2	A2 s/s
36636.W0080	M 8	13	8.5	6.8	A2 s/s
36636.W0100	M10	16	10.6	8.4	A2 s/s
36636.W0120	M12	18	12.85	10.8	A2 s/s
36636.W0140	M14	21	15.1	12.8	A2 s/s
36636.W0160	M16	24	17.5	14.8	A2 s/s

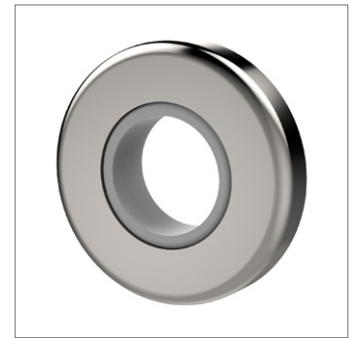
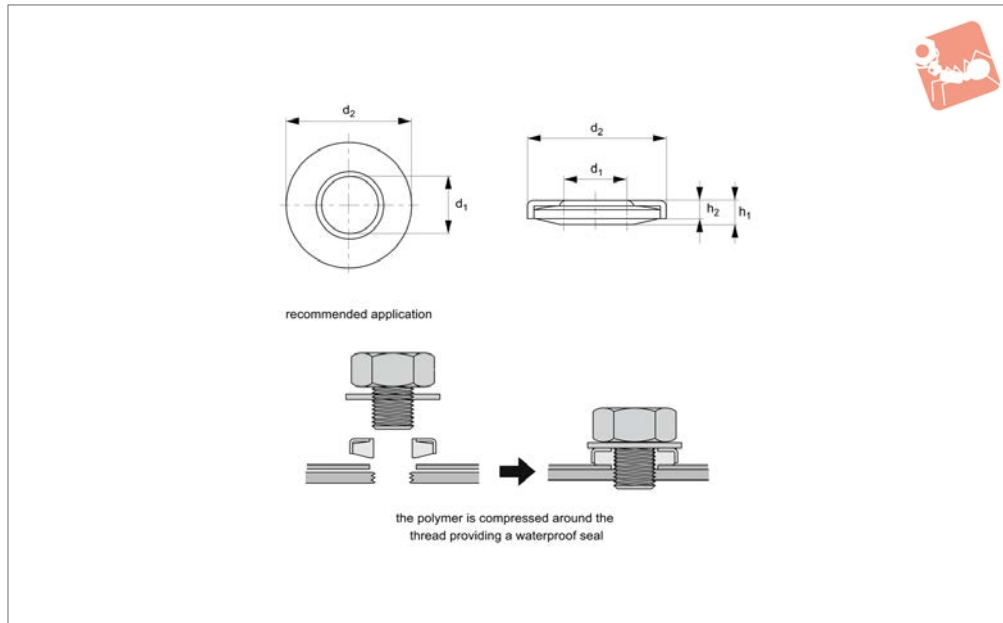


# Waterproof Seal Washers

304 stainless steel



## Sealing Screws



**36637**

SEALING SCREWS

### Material

Stainless steel (AISI 304, 1.4301), with thermoplastic elastomer (TPE) insert.

### Technical Notes

Seals substances in and contaminants out. For watertight applications, the seal is best

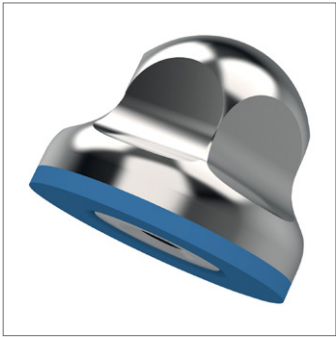
placed against a smooth material, ensuring a tight seal is created.

### Tips

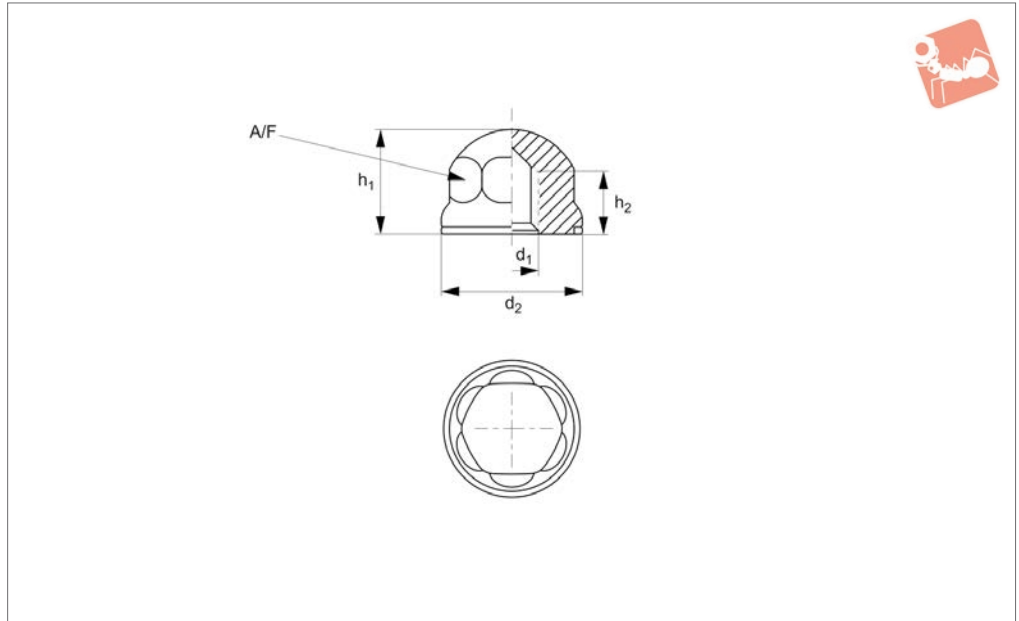
We recommend installing a flat washer above the sealing washer to ensure that uniform pressure is applied to the elas-

tomer inside the washer. We recommend that you test the sealing washer in your application to determine the optimum tightening torque. For use at -30 °C to 90 °C.

Order No.	For thread	d <sub>1</sub>	d <sub>2</sub>	h <sub>1</sub>	h <sub>2</sub>	Recommended tightening torque Nm	Rated pressure (liquids) Bar max.	Rated pressure (gases) Bar max.	Weight g
<b>36637.W0030</b>	M 3	3.0	8	3.1	2.5	0,3-0,6	7	7	0.4
<b>36637.W0040</b>	M 4	4.1	10	3.5	3.0	0,8-1,5	7	7	0.6
<b>36636.SP005</b>	M 5	5.1	12	3.5	3.0	1,5-3,0	7	7	1.0
<b>36637.W0060</b>	M 6	6.1	14	3.5	3.0	2,5-5,0	7	7	1.0
<b>36636.SP006</b>	M 8	8.1	18	4.0	3.0	6,2-12	7	7	2.0
<b>36637.W0100</b>	M10	10.1	23	4.0	3.0	24-12	7	7	3.0
<b>36637.W0120</b>	M12	12.1	25	4.0	3.0	21-42	7	7	4.0
<b>36637.W0160</b>	M16	16.1	30	4.5	3.0	53-106	7	7	6.0
<b>36637.W0200</b>	M20	20.1	37	4.5	3.0	103 min.	7	7	9.0



## 36638



SEALING SCREWS

### Material

AISI 304 stainless steel high-gloss polished dome-nut, FDA blue silicone gasket, 3-A accepted. Available on request in AISI 316.

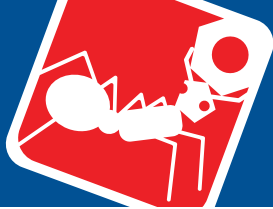
### Technical Notes

For use in hygienic areas, components can be mounted without dead spaces. Sealing ring is hydrogenated acrylonitrile butadiene rubber (H-NBR), hardness 85±5

shore A, temp range -25°C to +150°C, blue.

Polished finish Ra < 0,8µ

Order No.	d <sub>1</sub>	d <sub>2</sub>	h <sub>1</sub>	h <sub>2</sub>	A/F
36638.W0003	M 3x0,5	15	12	8	HEX 10
36638.W0004	M 4x0,7	15	12	8	HEX 10
36638.W0005	M 5x0,8	19	17	12	HEX 14
36638.W0006	M 6x1	19	17	12	HEX 14
36638.W0008	M 8x1,25	24	23	15	HEX 17
36638.W0010	M10x1,5	24	23	15	HEX 17
36638.W0012	M12x1,75	24	23	15	HEX 17
36638.W0014	M14x2	30	28	20	HEX 22
36638.W0016	M16x2	30	28	20	HEX 22
36638.W0020	M20x2,5	35	34	25	HEX 27
36638.W0024	M24x3	42	40	30	HEX 32

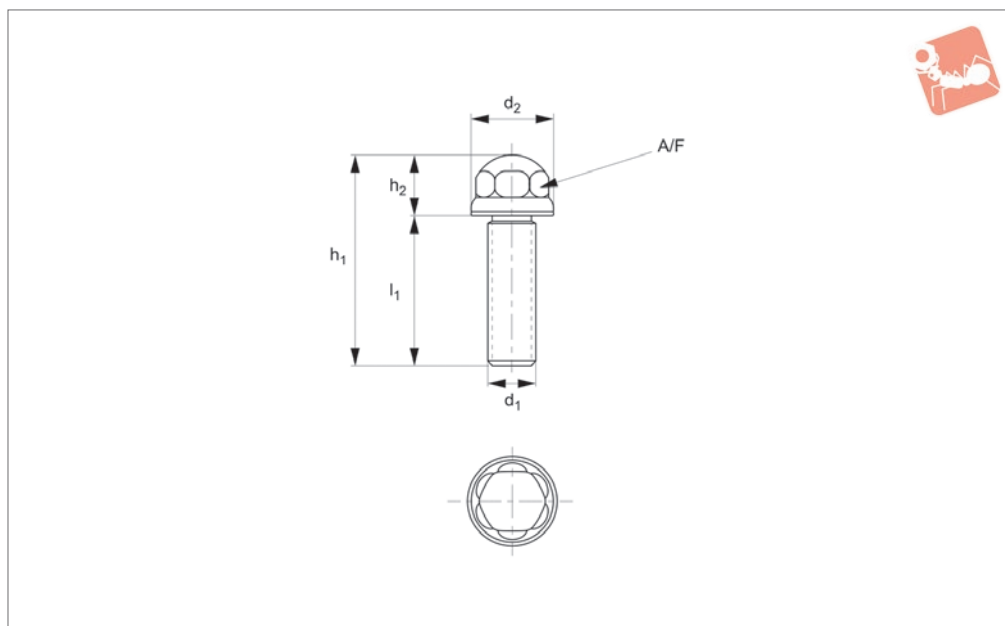


# Hygienic Screws - Male

304 stainless steel



## Sealing Screws



**37370**

SEALING SCREWS

### Material

Stainless steel (AISI 304) high-gloss polished dome-nut, FDA blue silicone gasket, 3-A accepted.

be mounted without dead spaces.

Sealing ring is hydrogenated acrylonitrile butadiene rubber (H-NBR), hardness 85±5 shore A, temp range -25°C to +150°C, blue.

Polished finish Ra < 0,8µ.

### Technical Notes

For use in hygienic areas, components can

Order No.	d <sub>1</sub>	d <sub>2</sub>	h <sub>1</sub>	l <sub>1</sub>	h <sub>2</sub>	A/F
37370.W0510	M5x0,8	19	24	10	14	HEX 14
37370.W0516	M5x0,8	19	26	16	10	HEX 14
37370.W0520	M5x0,8	19	34	20	14	HEX 14
37370.W0612	M6x1	19	26	12	14	HEX 14
37370.W0616	M6x1	19	30	16	14	HEX 14
37370.W0620	M6x1	19	34	20	14	HEX 14
37370.W0625	M6x1	19	39	25	14	HEX 14
37370.W0630	M6x1	19	44	30	14	HEX 14
37370.W0816	M8x1,25	24	33	16	17	HEX 17
37370.W0820	M8x1,25	24	37	20	17	HEX 17
37370.W0825	M8x1,25	24	42	25	17	HEX 17
37370.W0830	M8x1,25	24	47	30	17	HEX 17
37370.W0840	M8x1,25	24	57	40	17	HEX 17
37370.W1020	M10x1,5	24	37	20	17	HEX 17
37370.W1025	M10x1,5	24	42	25	17	HEX 17
37370.W1030	M10x1,5	24	47	30	17	HEX 17
37370.W1040	M10x1,5	24	57	40	17	HEX 17
37370.W1050	M10x1,5	24	67	50	17	HEX 17
37370.W1220	M12x1,75	24	27	20	7	HEX 17
37370.W1225	M12x1,75	24	42	25	17	HEX 17
37370.W1230	M12x1,75	24	47	30	17	HEX 17
37370.W1240	M12x1,75	24	57	40	17	HEX 17
37370.W1250	M12x1,75	24	67	50	17	HEX 17
37370.W1630	M16x2	30	52	30	22	HEX 22
37370.W1640	M16x2	30	62	40	22	HEX 22
37370.W1650	M16x2	30	72	50	22	HEX 22
37370.W1660	M16x2	30	82	60	22	HEX 22
37370.W1670	M16x2	30	92	70	22	HEX 22
37370.W1680	M16x2	30	102	80	22	HEX 22
37370.W2030	M20x2,5	35	56	30	26	HEX 27
37370.W2040	M20x2,5	35	66	40	26	HEX 27
37370.W2050	M20x2,5	35	76	50	26	HEX 27



Order No.	d <sub>1</sub>	d <sub>2</sub>	h <sub>1</sub>	l <sub>1</sub>	h <sub>2</sub>	A/F
<b>37370.W2060</b>	M20x2,5	35	86	60	26	HEX 27
<b>37370.W2070</b>	M20x2,5	35	96	70	26	HEX 27
<b>37370.W2080</b>	M20x2,5	35	106	80	26	HEX 27

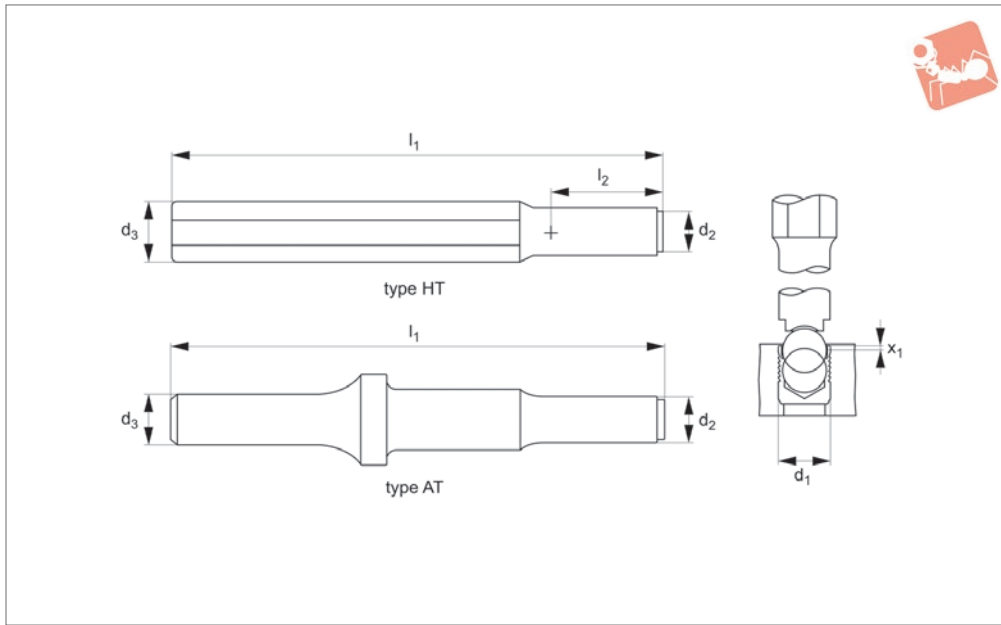




# Setting Tool for Sealing Plugs for expansion plugs



## Sealing Screws



**39000**

SEALING SCREWS

### Material

Tool steel, heat-treated.

### Technical Notes

Please consult technical pages for installa-

tion instructions and performance data.

Hand tool version and air tool (for multiple installations).

**Ensure the ball is fully seated before**

**applying pressure.**

### Tips

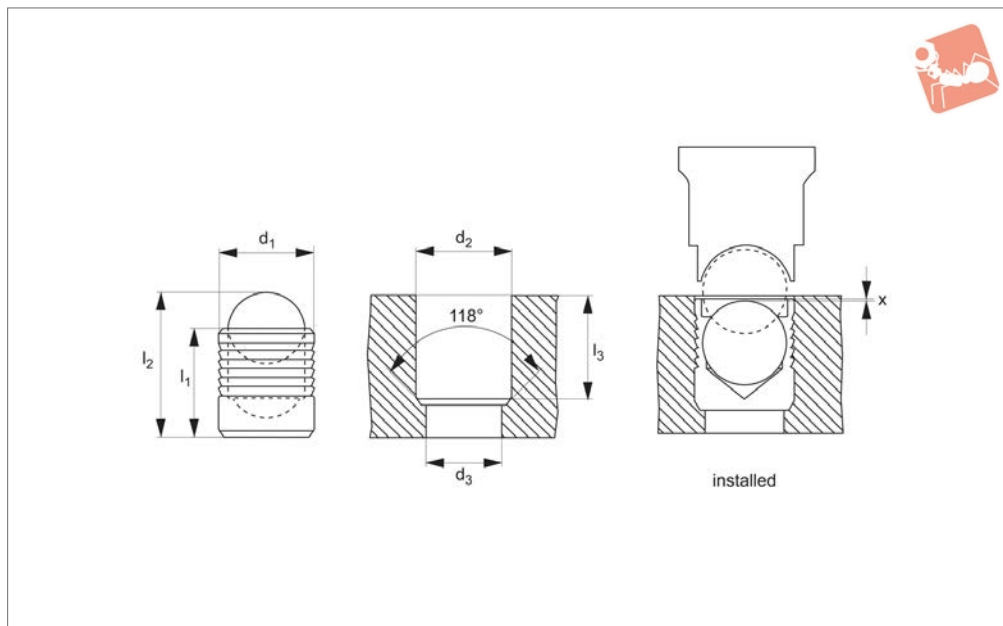
Metric dimensions in mm.

Inch dimensions in inches.

Order No.	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	l <sub>1</sub>	l <sub>2</sub>	x ±0.2	Type
39008.W1030	3.0	2.8	9.53	127	10	0.4	Hand
39008.W1040	4.0	3.8	9.53	127	10	0.2	Hand
39008.W1070	7.0	6.8	9.53	127	18	0.4	Hand
39008.W1080	8.0	7.8	9.53	127	20	0.3	Hand



### 39001



#### Material

Plug body: case hardened steel (zinc-plated), stainless steel (A2, AISI 303 & A4 AISI 316) or aluminium (2024-T4).

Ball: heat-treated bearing steel or stainless steel (A2, AISI 303 & A4 AISI 316).

#### Technical Notes

These high pressure sealing plugs are used to blank off externally drilled holes for air

and gas.

No need for tapping, reaming, machining of O-ring grooves or the use of tapes or sealants.

**Ensure the ball is fully seated before applying pressure.**

#### Tips

Working pressure up to 450 bar (dependent on body material and material into which

installed).

Please consult technical pages for installation instructions and performance data.

#### Important Notes

**Please refer to technical pages for product installation details.**

Order No.	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub> +0.1 -0.0	d <sub>3</sub> max.	l <sub>3</sub> min.	x ±0.2	Body	Ball
39001.W1040	4.0	4.0	5.2	4.0	3.3	3.8	0.2	Steel ZP	Steel
39001.W1050	5.0	5.5	7.1	5.0	4.3	5.3	0.4	Steel ZP	Steel
39001.W1060	6.0	6.5	8.7	6.0	5.3	6.3	0.4	Steel ZP	Steel
39001.W1070	7.0	7.5	10.2	7.0	6.4	7.3	0.4	Steel ZP	Steel
39001.W1080	8.0	8.5	11.6	8.0	7.4	8.3	0.3	Steel ZP	Steel
39001.W1100	10.0	11.0	15.2	10.0	9.4	10.8	0.4	Steel ZP	Steel
39001.W1160	16.0	17.0	23.4	16.0	14.7	16.5	0.6	Steel ZP	Steel
39001.W2030	3.0	3.6	4.6	3.0	2.2	3.4	0.4	A2 s/s	Steel
39001.W2040	4.0	4.0	5.2	4.0	3.3	3.8	0.2	A2 s/s	Steel
39001.W2050	5.0	5.5	7.1	5.0	4.3	5.3	0.4	A2 s/s	Steel
39001.W2060	6.0	6.5	8.7	6.0	5.3	6.3	0.4	A2 s/s	Steel
39001.W2120	12.0	13.0	17.9	12.0	10.6	12.8	0.4	A2 s/s	Steel
39001.W2160	16.0	17.0	23.4	16.0	14.7	16.5	0.6	A2 s/s	Steel
39001.W5030	3.0	3.6	4.6	3.0	2.2	3.4	0.4	Aluminium	A2 s/s
39001.W5050	5.0	5.5	7.1	5.0	4.3	5.3	0.4	Aluminium	A2 s/s
39001.W3030	3.0	3.6	4.6	3.0	2.2	3.4	0.4	A2 s/s	A2 s/s
39001.W3040	4.0	4.0	5.2	4.0	3.3	3.8	0.2	A2 s/s	A2 s/s
39001.W3050	5.0	5.5	7.1	5.0	4.3	5.3	0.4	A2 s/s	A2 s/s
39001.W3060	6.0	6.5	8.7	6.0	5.3	6.3	0.4	A2 s/s	A2 s/s
39001.W3080	8.0	8.5	11.6	8.0	7.4	8.3	0.3	A2 s/s	A2 s/s
39001.W3140	14.0	15.0	20.6	14.0	12.7	14.5	0.4	A2 s/s	A2 s/s
39001.W3160	16.0	17.0	23.4	16.0	14.7	16.5	0.6	A2 s/s	A2 s/s

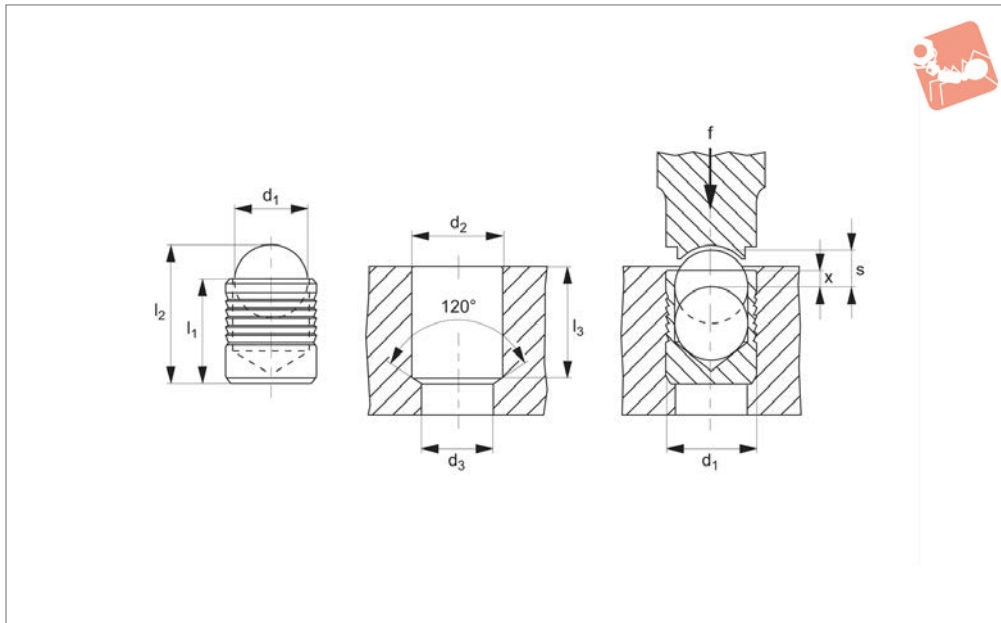


# Expander® Sealing Plugs

stainless steel body



# Sealing Screws



**39100**

SEALING SCREWS

### Material

Body: stainless steel 1,4305 (AISI 303).  
Ball: roller bearing steel, heat-treated, tempered.

quick and economic sealing of bore holes in fluid technology, e.g. hydraulic drilling holes in jig and fixtures. Setting dies are required for assembly.

nical pages.

### Technical Notes

Expander sealing plugs are used for safe,

### Tips

For assembly instructions please see tech-

Order No.	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub> ≈	d <sub>2</sub> +0.1	d <sub>3</sub> max.	l <sub>3</sub> min.	x ±0.2	s	Weight g
39100.W0053	3	3.6	4.6	3	2.2	3.4	0.4	1.20	0.1
39100.W0054	4	4.0	5.2	4	3.3	3.8	0.2	1.50	0.3
39100.W0055	5	5.5	7.0	5	4.3	5.3	0.4	2.00	0.7
39100.W0056	6	6.5	8.6	6	5.3	6.3	0.4	2.50	1.3
39100.W0057	7	7.5	10.1	7	6.4	7.3	0.4	3.00	2.4
39100.W0058	8	8.5	11.7	8	7.4	8.3	0.3	3.50	3.2
39100.W0059	9	10.0	13.7	9	8.4	9.8	0.4	4.00	4.5
39100.W0060	10	11.0	15.2	10	9.4	10.8	0.4	4.50	6.1
39100.W0062	12	13.0	18.0	12	10.6	12.8	0.4	5.50	9.7
39100.W0064	14	15.0	20.8	14	12.7	14.5	0.4	6.35	15.0
39100.W0066	16	17.0	23.7	16	14.7	16.5	0.6	7.00	22.0
39100.W0068	18	19.0	26.3	18	16.7	18.5	0.6	8.00	31.0
39100.W0070	20	22.0	30.5	20	18.7	21.5	0.8	9.00	46.0
39100.W0072	22	25.0	34.2	22	20.7	24.5	0.8	10.00	58.0

