

TURNED PARTS

From prototype to series production-readiness!

Umeta is the right partner for you and your turned parts projects. We support you from the very first development stage through initial sampling right up to series production-readiness.

Manufacturing special turned parts is one of our strengths, whether in small or large series. Our machinery consists of long CNC-controlled lathes and capstan lathes. We also provide assembly services and the manufacture of complete component groups as an option. This means we can offer complex machining facilities.

You will find locking plugs and air release valves in the standard programme of our turned parts division, and we would like to show you a few samples of further production facilities below.



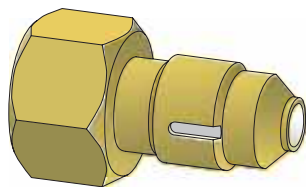
UMETA TURNED PARTS AT A GLANCE

- production batches from 1 piece
- raw material measurements from \varnothing 3 mm to \varnothing 42 mm
- turning lengths up to 600 mm
- machining of all removable materials
- high-precision production of complex contours (tolerance ranges of 0.02 mm and a surface roughness Rz of 1.0 μ m are possible)
- axial and radial milling / drilling with lathing of bars
- eccentric drilling with axial machining
- extensive machining of front and back sides with lathing of bars
- changes in machining contours can be realised quickly and economically by programming the parameters

EXAMPLES OF MACHINING FACILITIES

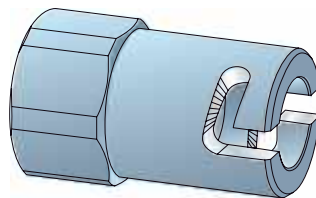
chain tensioner

(machining of front, back, air release groove)



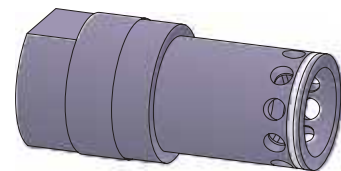
bayonet top

(radial milling of shell)



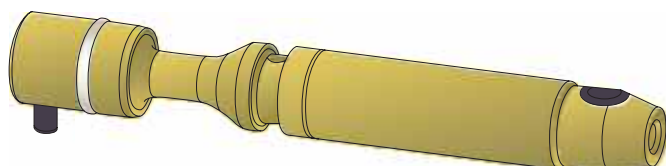
clamping hydraulic body

(radial two-step drilling/apply to spanner flat)



injection nozzle

(axial/radial machining, long turned parts, assembling)



AIR BLEED VALVES

The standard air bleed valves for venting and avoidance of undesirable pressure increases are zinc-plated and passivated, and they are featured with a tapered thread. The following types are representing a selection of the most commonly used air bleed valves.

Upon request, UMETA manufactures air bleed valves in other versions, with respect to the following:

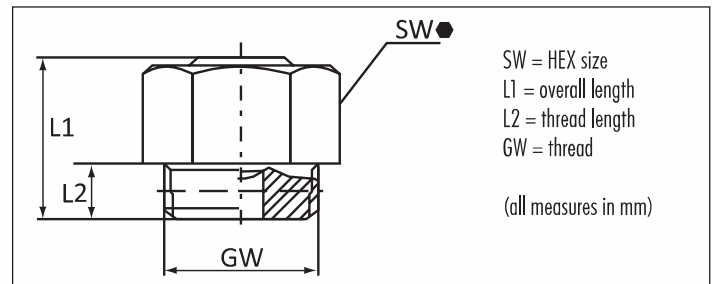
- opening pressure
- dimension
- material
- thread size
- thread form (e. g. with cylindrical thread)
- further surface treatment
- etc.



Air bleed valves



- for venting gears
- for the avoidance of undesirable pressure increases in universal joints
- made of steel, zinc-plated and passivated, with tapered thread
- for other types and materials, please see table, or upon request



GW		M 6 x 1.0		Ref.- No.:		
L1	L2	SW	Opening pressure	Steel	SST303	SST316L
11	7	7 mm HEX	● approx. 3 bar	5270020		
11	7	7 mm HEX	● approx. 8-12 bar	5270022		

GW		M 8 x 1.0		Ref.- No.:		
L1	L2	SW	Opening pressure	Steel	SST303	SST316L
11.6	6	11 mm HEX	● approx. 2.5 bar	5244082		

GW		M 10 x 1.0		Ref.- No.:		
L1	L2	SW	Opening pressure	Steel	SST303	SST316L
11.6	4	11 mm HEX	● approx. 2.5 bar	5244084	5244083	5244088
11.6	6	11 mm HEX	● approx. 5 bar		* 5244080	
11.6	6	11 mm HEX	● approx. 5 bar	5244085		
11.6	6	11 mm HEX	● approx. 7.5 bar	5244089		

GW		R 1/8, 1/8 - 28 BSP		Ref.- No.:		
L1	L2	SW	Opening pressure	Steel	SST303	SST316L
11.6	6	11 mm HEX	● approx. 2.5 bar	5800017		
11.6	6	11 mm HEX	● approx. 5 bar	5244086	5244087	

*with BUNA ball

LOCKING PLUGS

The standard locking plugs for closure of bore-holes are made of steel, zinc-plated and passivated, and they are featured with a tapered thread.

The following types are representing a selection of the most commonly used locking plugs.

Upon request, UMETA manufactures locking plugs in further versions, with respect to the following:

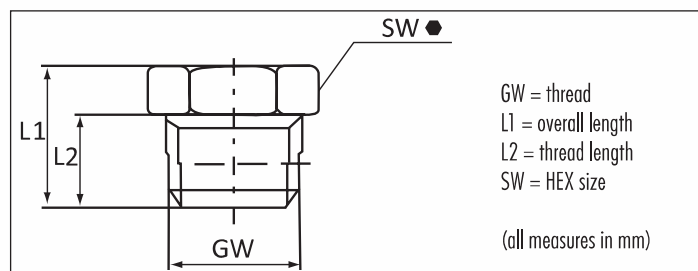
- dimension
- material
- thread size
- thread form (e. g. with cylindrical thread)
- length
- etc.



Locking Plugs



- for subsequent closing of boreholes
- made of steel, zinc-plated and passivated, with tapered thread
- for other types and materials, please see table, or upon request



GW M 6 x 1.0			Ref.- No.:		
L1	L2	SW	Steel	SST303	SST316L
8.5	5.5	7 mm HEX	5180142		

GW M 12 x 1.5			Ref.- No.:		
L1	L2	SW	Steel	SST303	SST316L
12	8	14 mm HEX	5581136		

GW M 8 x 1.0			Ref.- No.:		
L1	L2	SW	Steel	SST303	SST316L
8.5	5.5	9 mm HEX	5180117		

GW R 1/8, 1/8 - 28 BSP			Ref.- No.:		
L1	L2	SW	Steel	SST303	SST316L
8.5	5.5	11 mm HEX	5180122		

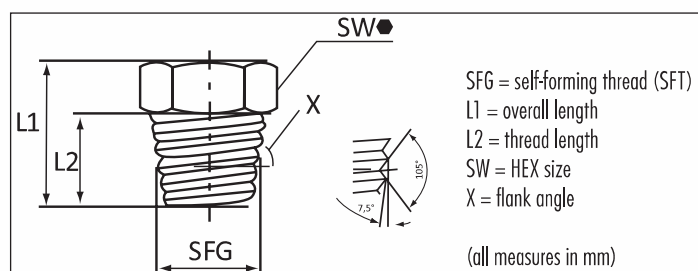
GW M 10 x 1.0			Ref.- No.:		
L1	L2	SW	Steel	SST303	SST316L
9	5.5	11 mm HEX	5581133		
8	4.5	11 mm HEX	5180125		

GW 1/4"-28 UNF-2A			Ref.- No.:		
L1	L2	SW	Steel	SST303	SST316L
8.5	5.5	7 mm HEX	5180143		

Locking Plugs with Self-Forming Thread



- for subsequent closing of boreholes
- standard version made of steel, case-hardened according to DIN (650 HV) and yellow passivated
- with self-forming thread



APPLICATION AREA

By using UMETA locking plugs with self-forming thread (SFT/SFG) you effectively save the thread-cutting process in the borehole.

MOUNTING INSTRUCTIONS

The special thread angle and the specific hardness level allow these plugs to be driven and screwed into boreholes without prior thread cutting.

Thus, the thread of the plug forms its counterhead. Later, the plug can easily be screwed out and be replaced by a standard locking plug. The exact size of the core hole depends on the material and must be determined by mounting tests. The consistency of the receiving material is decisive. The standard gauge for the installation bore diameter of 0.4-0.5 mm (= 0.02") below nominal width have proved in daily use.

SFG S 6 x 1			Ref.- No.:		
L1	L2	SW	Steel	not available in other materials	
8.5	5.5	7 mm HEX	5180146		

SFG S 8 x 1			Ref.- No.:		
L1	L2	SW	Steel	not available in other materials	
8.5	5.5	9 mm HEX	5180116		