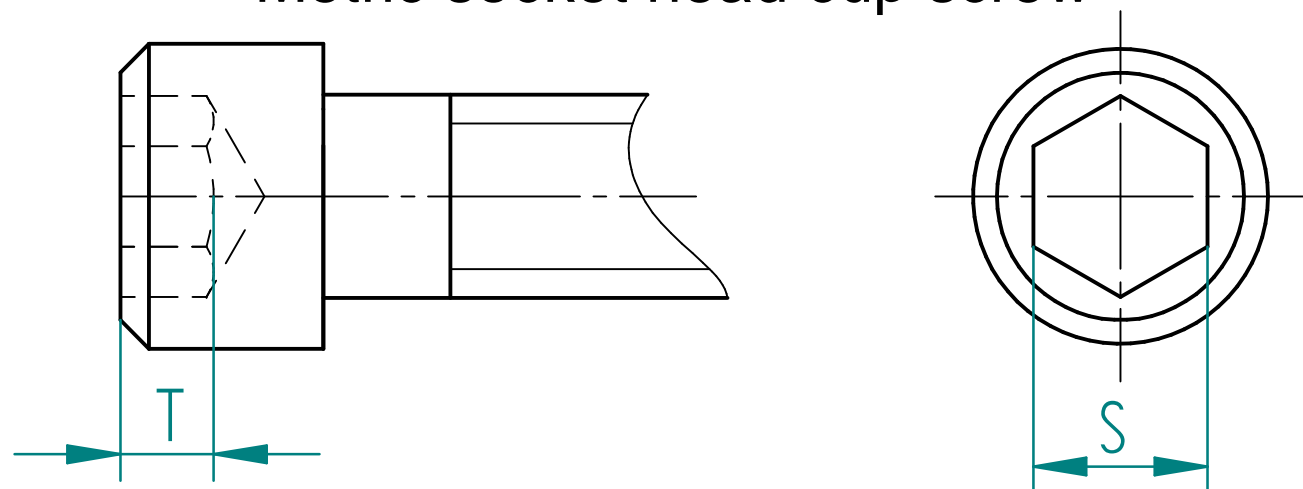


Metric socket head cup screw



Dimensions of hex socket head cup screw.

**Exercise 3.** For the given construction data of container create an assembly drawing and also the working drawing of its body (frame) and its lid.

**Remark:** Dimensions marked on this drawing are needed to solve the exercise of construction. Some of them are not consistent with the actually valid Polish Standards of technical drawing.

### Data for construction of the container and ranges of selected parameters

Screw dimensions			
Diameter of the thread of the screw socket head cup screw (hex socket) – d	M8	M10	M12
Number of screw – n (6, 8, 12)			
Length of screw – L	35	40	50
Length of screw – L	40	45	55
Length of screw – L	45	50	60
Diameter of the hole in the lid for the screw – D <sub>1</sub>	10	12	14
Diameter of the head of screw – D <sub>2</sub>	12	15	18
Height of the head of screw – k	8	10	12
Diameter of the hole in the lid for the head of screw – D <sub>3</sub>	14	17	20
Depth of the hole in the lid for the head of screw – t	9	11	13
Thickness of the seal – h	1.0	1.5	2.0
Surplus on the depth of hole – L <sub>3</sub>	8	9	11
Size of hex socket head cup screw – S	6	8	10
Dimensions of the Container			
Height of the container – H (140, 170, 200)			
Outer diameter – ϕzew (240, 280, 320)			
Inner diameter – ϕzew = ϕzew – 5*M			
Thickness of the lid G is the same as thickness of the wall of container.			
Thickness of the bottom is the same as thickness of the wall of container.			
Inner corner radius – R (20, 25, 30)			