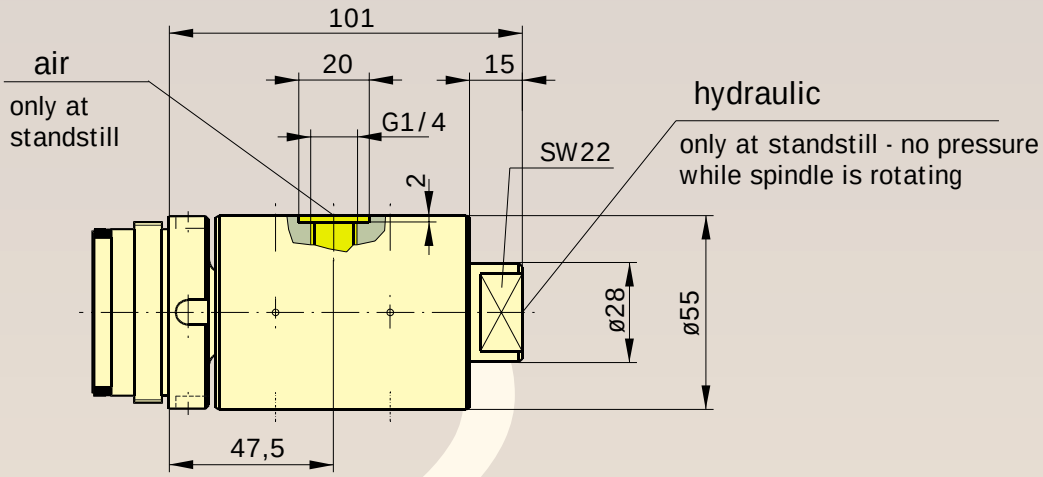
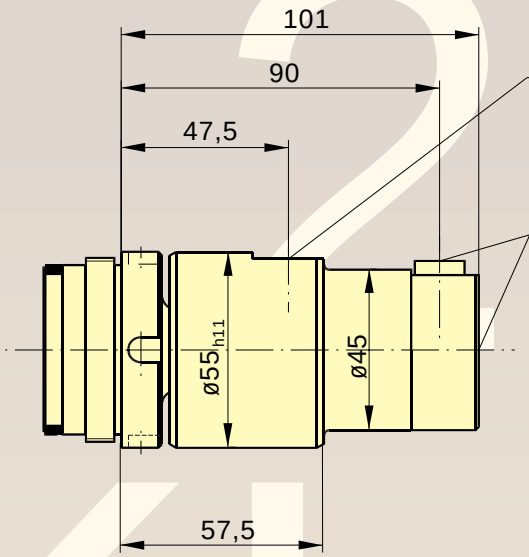


code	
1	4

technical data	
spindle speed max. (min^{-1})	10.000
hydr. pressure max.; n=0 min^{-1} [bar]	160
air pressure max.; n=0 $min.^{-1}$ [bar]	10

features
• cleaning air during tool changing • hydraulic unclamping of power drawbars



air

air blast while spindle is rotating;
cleaning air during standstill

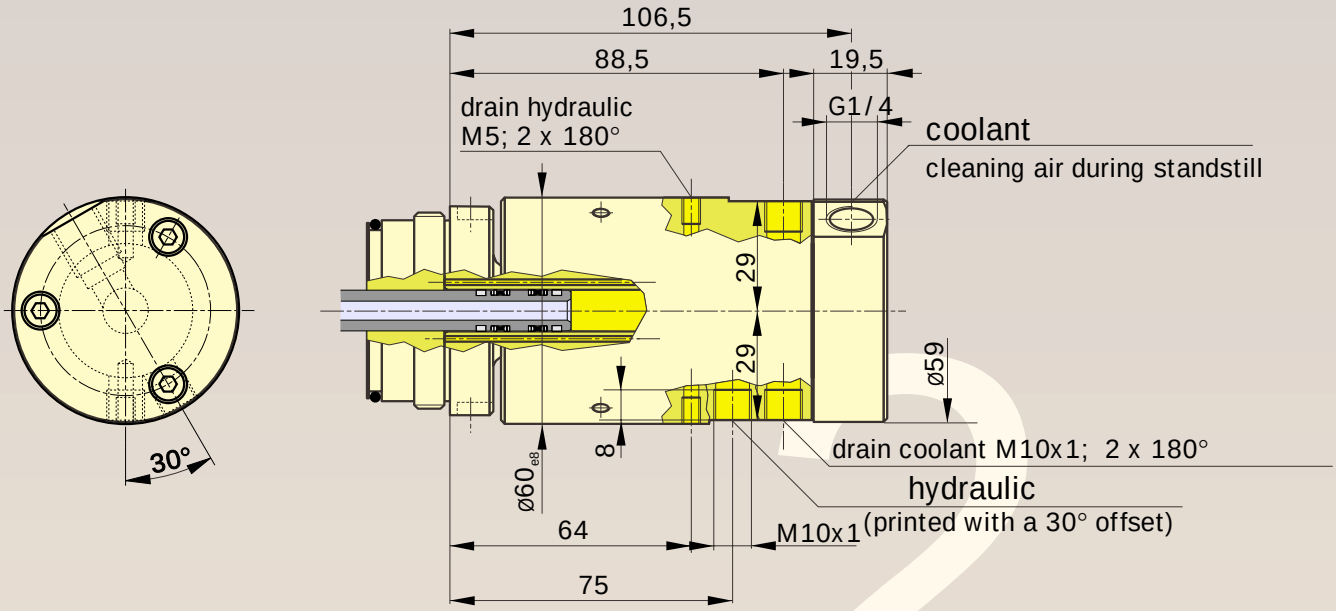
hydraulic

M10x1; radial or axial
only at standstill - no pressure
while spindle is rotating

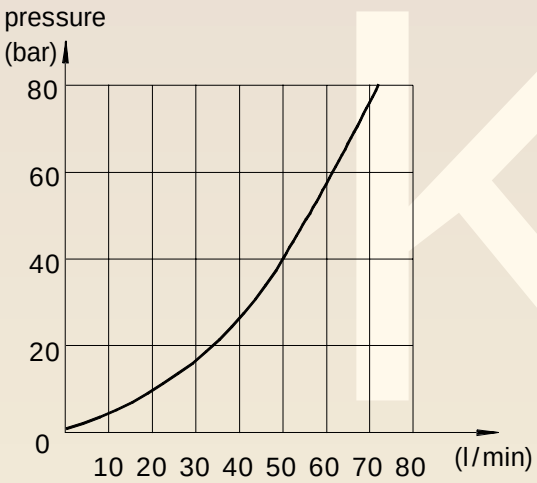
code	
2	8

technical data	
spindle speed max. (min^{-1})	20.000
hydr. pressure max.; n=0 min^{-1} [bar]	160
air pressure max. [bar]	10

features
• due to aluminium housing, hybrid bearing and air blast during rotation especially suitable for HSC-operations on wood, plastic, light alloy and other dry operations
• hydraulic unclamping of HSC-power drawbars



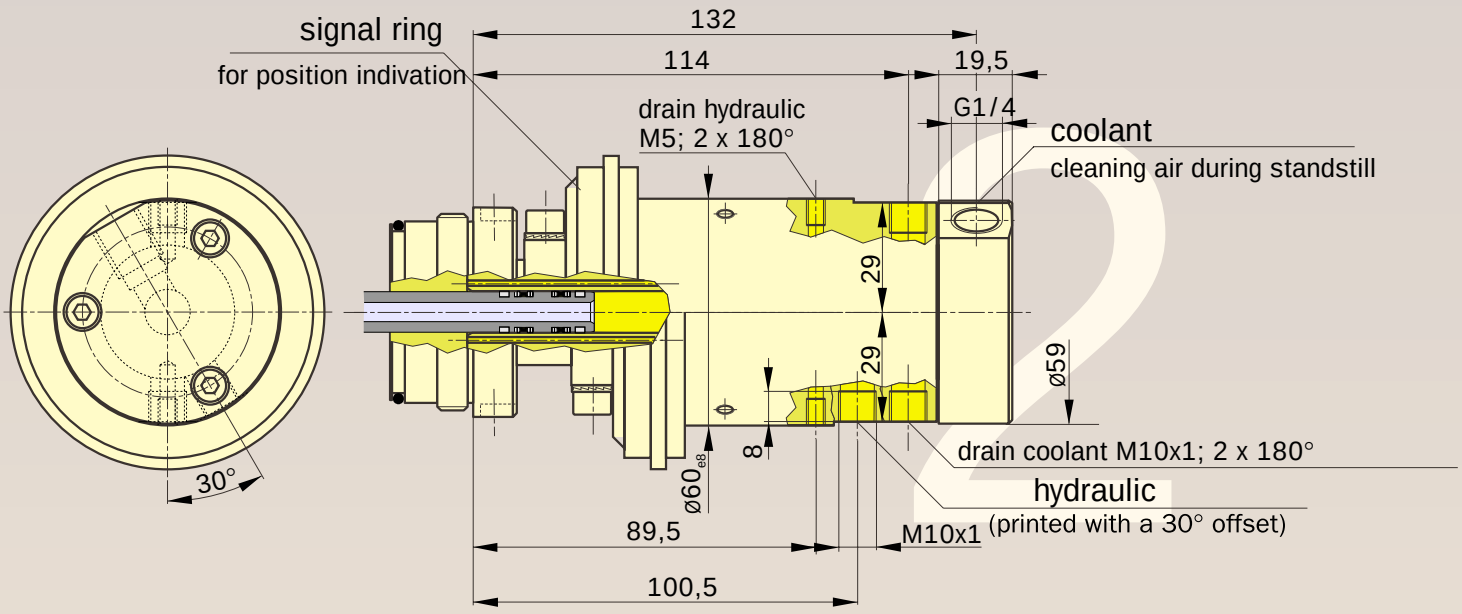
flow volume
at orifice ø5



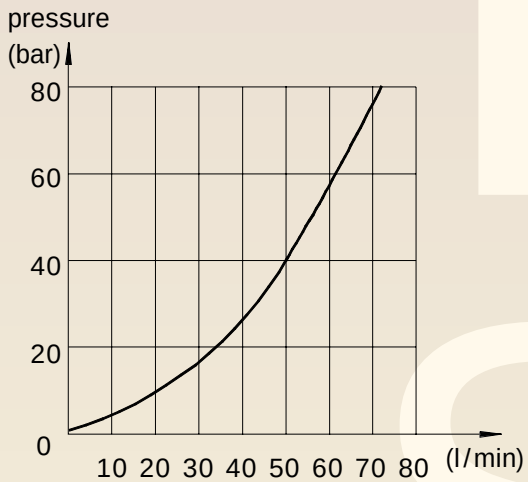
code	
2	5

technical data	
spindle speed max. (min.$^{-1}$)	10.000
coolant pressure max. [bar]	80
hydr. pressure max.; n=0 min.$^{-1}$ [bar]	160
air pressure max.; n=0 min.$^{-1}$ [bar]	10
required media purity according to ISO 4406 filter grade [µm]	-/16/13 <50

features
• suitable for dry operation • hydraulic unclamping of power drawbars • central coolant supply • cleaning air during tool changing



flow volume
at orifice ø5



code	
2	6

technical data	
spindle speed max. (min^{-1})	8.000
coolant pressure max. [bar]	80
hydr. pressure max.; n=0 $min.^{-1}$ [bar]	160
air pressure max.; n=0 $min.^{-1}$ [bar]	10
required media purity according to 4406 filter grade [µm]	-/16/13 <50
stroke of signal ring max. [mm]	12,5

features
• suitable for dry operation • hydraulic unclamping of power drawbars • central coolant supply • cleaning air during tool changing • signal ring for position indication

Subject to modification due to technical advance!