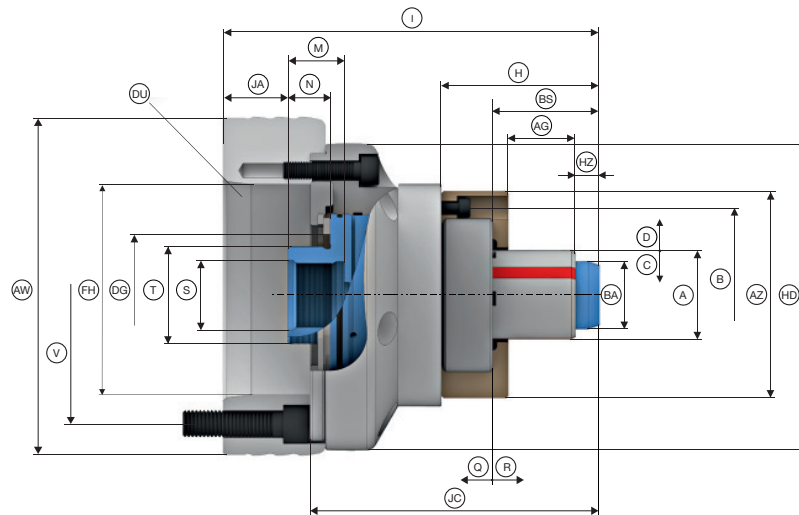


STANDARD SEGMENTED MANDRELS

Mandrel MAXXOS

MAXXOS T211 size A with flange. Technical data

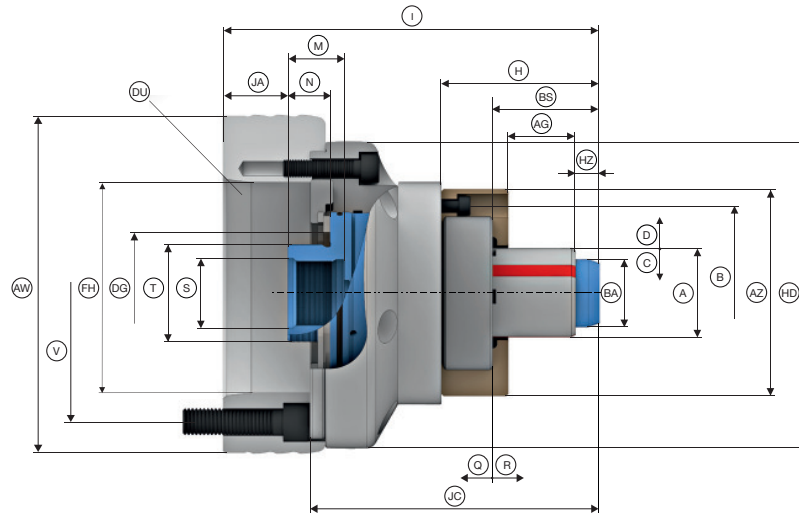


Size	A								
Clamping range [mm]	18 – 24								
Spindle nose	DU	KK4	KK5	KK6	KK8	AP120	AP140	AP170	AP220
Concentricity [mm]					0,010				
Max. radial clamping force [kN]					27				
Max. axial drawtube force [kN]					7,5				
Max. clamping length [mm]	AG				20				
Reserve stroke in Ø [mm]	D				0,26				
Release stroke in Ø [mm]	C				0,18				
RPM n max. [1/min.]					7000				
Reserve stroke axial [mm]	Q				2				
Release stroke axial [mm]	R				2				
Max. actuating torque [Nm]	BC				7				
Draw bolt Ø [mm]	BA				17				
Draw bolt head height [mm]	HZ				7,5				
Reception workpiece end-stop	FD				Ø 32 f7				
End-stop outer Ø [mm]	AZ				65				
Bolt hole circle end-stop	B				LK Ø 50 [3 x M6]				
Length [mm]	H				40				
Length 2 [mm]	BS				32,5				
Length 3 [mm]	JC				100				
Total length [mm]	I	140		144				140	
Connecting thread inside	S				M30 x 1,5				
Connecting thread outside	T				M44 x 1,5				
Distance [mm]	JA	30		34				30	
Depth of thread [mm]	M				25,5				
Thread length [mm]	N				19				
Max. drawtube Ø [mm]	DG				54				
Minimum length of DG [mm]					13				
Bore-Ø	FH	61	79,6	103,2	100	77	80		103
Bolt hole circle	V	LK Ø 82,6 [3 x M10]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]		LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]
Outer Ø [mm]	AW	140		165	210	140	150	180	230
Outer Ø 2 [mm]	HD					139			
Air sensing control bolt hole circle-Ø [mm]	HQ					58			
Air sensing control bore Ø [mm]	KN					3			
Central air sensing connection Ø optional [mm]						12 H7			
Weight [kg]		8,5	10,7	12,4	13,6	8,1	8,7	10,5	16,1

STANDARD SEGMENTED MANDRELS

Mandrel MAXXOS

MAXXOS T211 size B with flange. Technical data

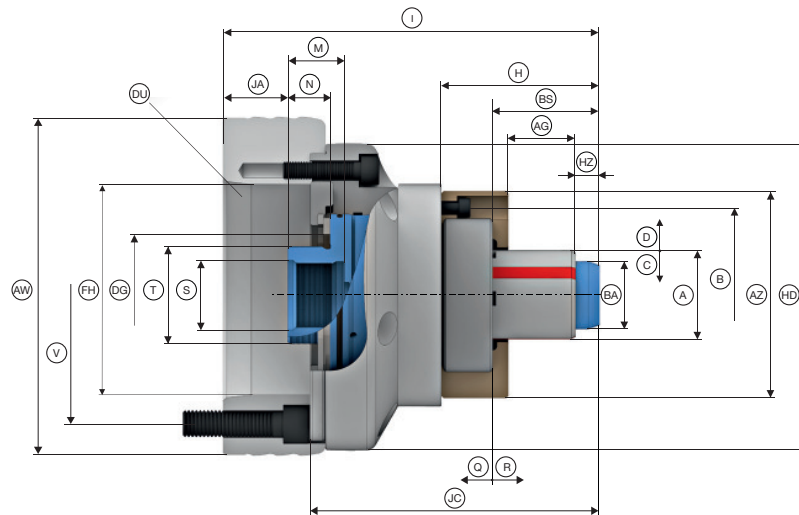


Size	B								
Clamping range [mm]	A	20 – 32							
Spindle nose	DU	KK4	KK5	KK6	KK8	AP120	AP140	AP170	AP220
Concentricity [mm]						0,010			
Max. radial clamping force [kN]						36			
Max. axial drawtube force [kN]						10			
Max. clamping length [mm]	AG					22,5			
Reserve stroke in Ø [mm]	D					0,26			
Release stroke in Ø [mm]	C					0,17			
RPM n max. [1/min.]						7000			
Reserve stroke axial [mm]	Q					2			
Release stroke axial [mm]	R					2			
Max. actuating torque [Nm]	BC					10			
Draw bolt Ø [mm]	BA					19			
Draw bolt head height [mm]	HZ					7,5			
Reception workpiece end-stop	FD					Ø 32 f7			
End-stop outer Ø [mm]	AZ					65			
Bolt hole circle end-stop	B					LK Ø 50 [3 x M6]			
Length [mm]	H					40			
Length 2 [mm]	BS					32,5			
Length 3 [mm]	JC					100			
Total length [mm]	I	140		144				140	
Connecting thread inside	S					M30 x 1,5			
Connecting thread outside	T					M44 x 1,5			
Distance [mm]	JA	30		34				30	
Depth of thread [mm]	M					25,5			
Thread length [mm]	N					19			
Max. drawtube Ø [mm]	DG					54			
Minimum length of DG [mm]						13			
Bore-Ø	FH	61	79,6	103,2	100	77	80		103
Bolt hole circle	V	LK Ø 82,6 [3 x M10]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]		LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]
Outer Ø [mm]	AW	140		165	210	140	150	180	230
Outer Ø 2 [mm]	HD					139			
Air sensing control bolt hole circle-Ø [mm]	HQ					64			
Air sensing control bore Ø [mm]	KN					3			
Central air sensing connection Ø optional [mm]						12 H7			
Weight [kg]		8,9	11,1	12,8	14,0	8,5	9,1	10,9	16,5

STANDARD SEGMENTED MANDRELS

Mandrel MAXXOS

MAXXOS T211 size C with flange. Technical data

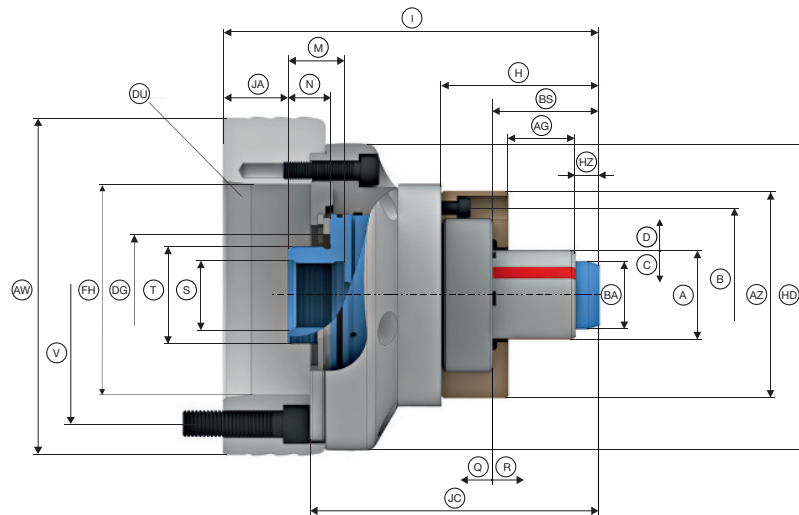


Size	C										
Clamping range [mm]	A	24 - 39									
Spindle nose	DU	KK4	KK5	KK6	KK8	AP120	AP140	AP170	AP220		
Concentricity [mm]		0,010									
Max. radial clamping force [kN]		51									
Max. axial drawtube force [kN]		16									
Max. clamping length [mm]	AG	24									
Reserve stroke in Ø [mm]	D	0,4									
Release stroke in Ø [mm]	C	0,26									
RPM n max. [1/min.]		7000									
Reserve stroke axial [mm]	Q	2									
Release stroke axial [mm]	R	2									
Max. actuating torque [Nm]	BC	15									
Draw bolt Ø [mm]	BA	23									
Draw bolt head height [mm]	HZ	11									
Reception workpiece end-stop	FD	Ø 41 f7									
End-stop outer Ø [mm]	AZ	69									
Bolt hole circle end-stop	B	LK Ø 55 [3 x M6]									
Length [mm]	H	53,5									
Length 2 [mm]	BS	40									
Length 3 [mm]	JC	110									
Total length [mm]	I	150		154				150			
Connecting thread inside	S	M30 x 1,5									
Connecting thread outside	T	M44 x 1,5									
Distance [mm]	JA	30		34				30			
Depth of thread [mm]	M	25,5									
Thread length [mm]	N	19									
Max. drawtube Ø [mm]	DG	54									
Minimum length of DG [mm]		13									
Bore-Ø	FH	61	79,6	103,2	100	77	80	103			
Bolt hole circle	V	LK Ø 82,6 [3 x M10]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 104,8 [6 x M10]		LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]		
Outer Ø [mm]	AW	140		165		210		140	150	180	230
Outer Ø 2 [mm]	HD	139									
Air sensing control bolt hole circle-Ø [mm]	HQ	64									
Air sensing control bore Ø [mm]	KN	3									
Central air sensing connection Ø optional [mm]		12 H7									
Weight [kg]		8,6	10,8	12,5	13,7	8,2	8,8	10,6	16,2		

STANDARD SEGMENTED MANDRELS

Mandrel MAXXOS

MAXXOS T211 size D with flange. Technical data

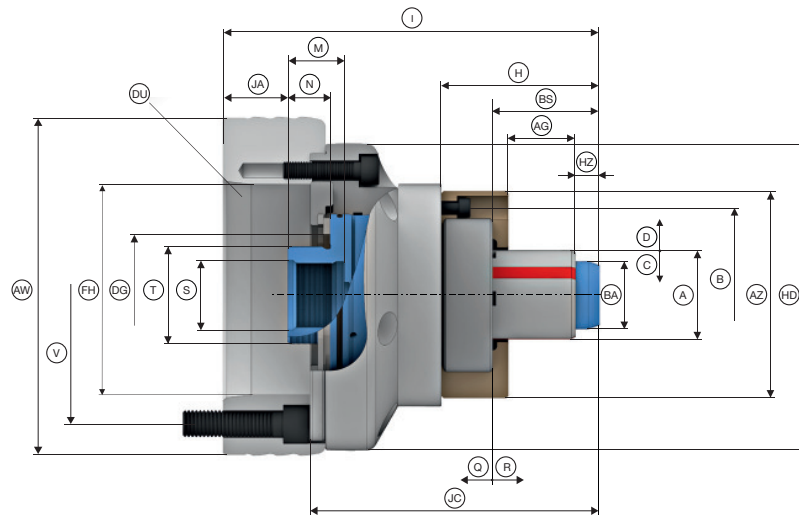


Size	D								
Clamping range [mm]	A								
Spindle nose	DU								
	32 - 50								
	KK4	KK5	KK6	KK8	AP120	AP140	AP170	AP220	
Concentricity [mm]	0,010								
Max. radial clamping force [kN]	70								
Max. axial drawtube force [kN]	22								
Max. clamping length [mm]	35,3								
Reserve stroke in Ø [mm]	0,4								
Release stroke in Ø [mm]	0,3								
RPM n max. [1/min.]	7000								
Reserve stroke axial [mm]	2								
Release stroke axial [mm]	2,5								
Max. actuating torque [Nm]	20								
Draw bolt Ø [mm]	31								
Draw bolt head height [mm]	11,2								
Reception workpiece end-stop	Ø 50 f7								
End-stop outer Ø [mm]	93								
Bolt hole circle end-stop	LK Ø 78 [3 x M6]								
Length [mm]	71								
Length 2 [mm]	51,5								
Length 3 [mm]	130								
Total length [mm]	170		174		170				
Connecting thread inside	M30 x 1,5								
Connecting thread outside	M44 x 1,5								
Distance [mm]	30		34		30				
Depth of thread [mm]	25,5								
Thread length [mm]	19								
Max. drawtube Ø [mm]	62,5								
Minimum length of DG [mm]	13								
Bore-Ø	FH	61	79,6	103,2	100	77	80	103	
Bolt hole circle	V	LK Ø 82,6 [3 x M10]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	
Outer Ø [mm]	AW	140		210		140	150	180	230
Outer Ø 2 [mm]	HD	139							
Air sensing control bolt hole circle-Ø [mm]	HQ	82							
Air sensing control bore Ø [mm]	KN	3							
Central air sensing connection Ø optional [mm]		12 H7							
Weight [kg]		9,3	11,5	13,3	14,4	8,9	9,5	11,3	16,9

STANDARD SEGMENTED MANDRELS

Mandrel MAXXOS

MAXXOS T211 size E with flange. Technical data

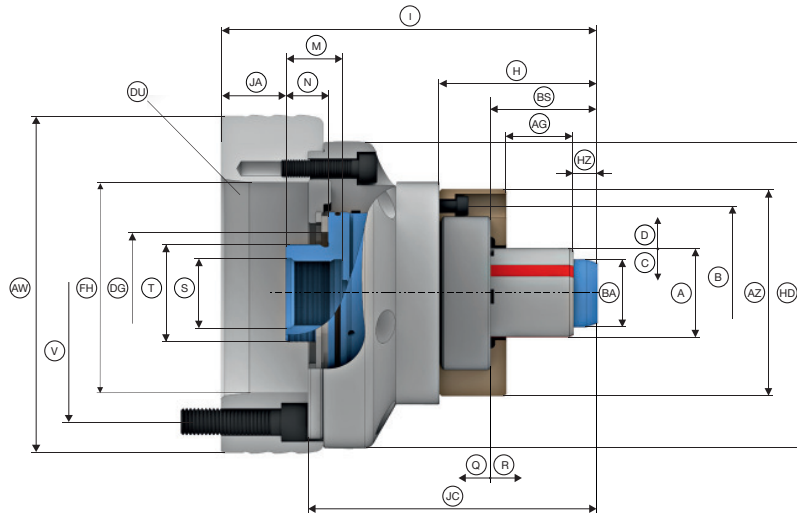


Size	E										
Clamping range [mm]	A	39 – 68									
Spindle nose	DU	KK4	KK5	KK6	KK8	AP120	AP140	AP170	AP220		
Concentricity [mm]		0,010									
Max. radial clamping force [kN]		86									
Max. axial drawtube force [kN]		27									
Max. clamping length [mm]	AG	45,3									
Reserve stroke in Ø [mm]	D	0,4									
Release stroke in Ø [mm]	C	0,3									
RPM n max. [1/min.]		7000									
Reserve stroke axial [mm]	Q	2									
Release stroke axial [mm]	R	2,5									
Max. actuating torque [Nm]	BC	25									
Draw bolt Ø [mm]	BA	38									
Draw bolt head height [mm]	HZ	11,2									
Reception workpiece end-stop	FD	Ø 65 f7									
End-stop outer Ø [mm]	AZ	96									
Bolt hole circle end-stop	B	LK Ø 80 [3 x M6]									
Length [mm]	H	78									
Length 2 [mm]	BS	61,5									
Length 3 [mm]	JC	140									
Total length [mm]	I	180		184				180			
Connecting thread inside	S	M30 x 1,5									
Connecting thread outside	T	M44 x 1,5									
Distance [mm]	JA	30		34				30			
Depth of thread [mm]	M	25,5									
Thread length [mm]	N	19									
Max. drawtube Ø [mm]	DG	62,5									
Minimum length of DG [mm]		13									
Bore-Ø	FH	61	79,6	103,2	100	77	80	103			
Bolt hole circle	V	LK Ø 82,6 [3 x M10]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 104,8 [6 x M10]		LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]		
Outer Ø [mm]	AW	140		165		210		140	150	180	230
Outer Ø 2 [mm]	HD	139									
Air sensing control bolt hole circle-Ø [mm]	HQ	84									
Air sensing control bore Ø [mm]	KN	3									
Central air sensing connection Ø optional [mm]		12 H7									
Weight [kg]		9,9	12,1	13,9	15	9,5	10,1	11,9	17,5		

STANDARD SEGMENTED MANDRELS

Mandrel MAXXOS

MAXXOS T211 size F with flange. Technical data



Size		F									
Clamping range [mm]		50 – 100									
Spindle nose		KK4	KK5	KK6	KK8	AP120	AP140	AP170	AP220		
Concentricity [mm]	DU	0,010									
Max. radial clamping force [kN]		143									
Max. axial drawtube force [kN]		45									
Max. clamping length [mm]	AG	45,3									
Reserve stroke in Ø [mm]	D	0,4									
Release stroke in Ø [mm]	C	0,3									
RPM n max. [1/min.]		7000									
Reserve stroke axial [mm]	Q	2									
Release stroke axial [mm]	R	2,5									
Max. actuating torque [Nm]	BC	55									
Draw bolt Ø [mm]	BA	49									
Draw bolt head height [mm]	HZ	11,7									
Reception workpiece end-stop	FD	Ø 65 f7									
End-stop outer Ø [mm]	AZ	96									
Bolt hole circle end-stop	B	LK Ø 80 [3 x M6]									
Length [mm]	H	78									
Length 2 [mm]	BS	62									
Length 3 [mm]	JC	140									
Total length [mm]	I	180		184				180			
Connecting thread inside	S	M30 x 1,5									
Connecting thread outside	T	M44 x 1,5									
Distance [mm]	JA	30		34				30			
Depth of thread [mm]	M	25,5									
Thread length [mm]	N	19									
Max. drawtube Ø [mm]	DG	62,5									
Minimum length of DG [mm]		13									
Bore-Ø	FH	61	79,6	103,2	100	77	80	103			
Bolt hole circle	V	LK Ø 82,6 [3 x M10]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 104,8 [6 x M10]		LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]		
Outer Ø [mm]	AW	140		165		210		140	150	180	230
Outer Ø 2 [mm]	HD	139									
Air sensing control bolt hole circle-Ø [mm]	HQ	84									
Air sensing control bore Ø [mm]	KN	3									
Central air sensing connection Ø optional [mm]		12 H7									
Weight [kg]		10,2	12,4	14,2	15,3	9,8	10,4	12,2	17,8		