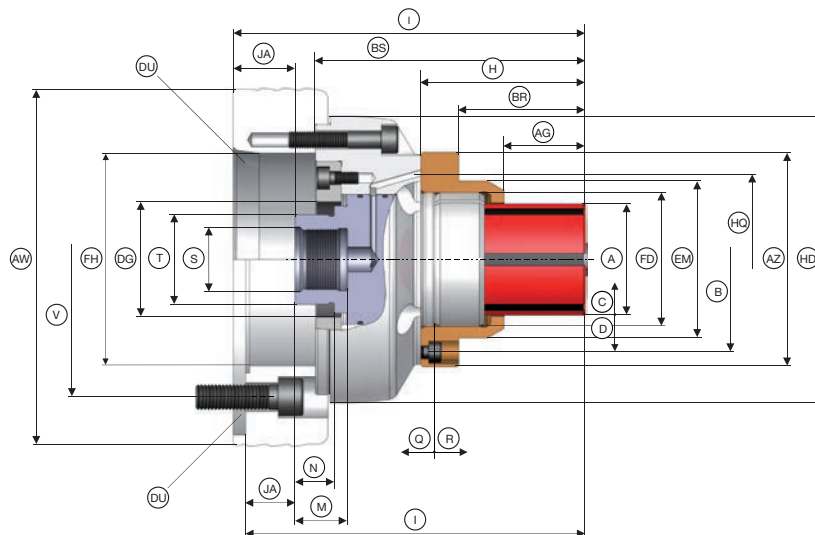


STANDARD SEGMENTED MANDRELS

Mandrel MANDO

MANDO T812 size XXS with flange. Technical data



Size	XXS							
Clamping range [mm]	A							
Spindle nose	DU							
	A2-4	A2-5	A2-6	A2-8	AP120	AP140	AP170	AP220
Concentricity [mm]	0,025							
Max. radial clamping force [kN]	42							
Max. axial compression force [kN]	10							
Max. clamping length [mm]	AG							
Reserve stroke in Ø [mm]	D							
Release stroke in Ø [mm]	C							
RPM n max. [1/min.]	7000							
Reserve stroke axial [mm]	Q							
Release stroke axial [mm]	R							
Reception workpiece end-stop	FD							
End-stop outer Ø [mm]	AZ							
End-stop outer Ø 2 [mm]	EM							
Bolt hole circle end-stop	B							
Length [mm]	H							
Length 2 [mm]	BS							
Total length [mm]	I							
Depth [mm]	BR							
Connecting thread inside	S							
Connecting thread outside	T							
Distance [mm]	JA							
Depth of thread [mm]	M							
Thread length [mm]	N							
Max. drawtube Ø [mm]	DG							
Minimum length of DG [mm]	FH							
Bore-Ø	V							
Bolt hole circle	AW							
Outer Ø [mm]	HD							
Outer Ø 2 [mm]	HQ							
Air sensing control bolt hole circle-Ø [mm]								
Air sensing control bore Ø [mm]								
Central air sensing connection Ø optional [mm]								
Weight [kg]								



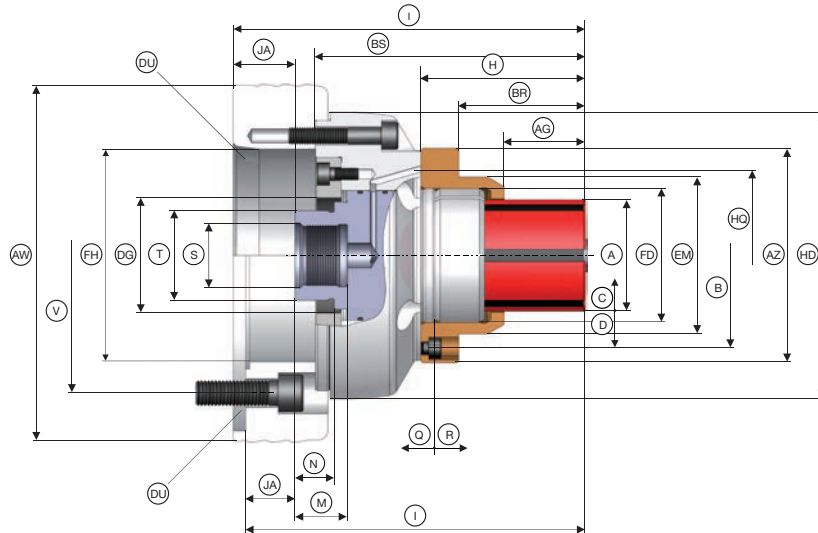
Scope of delivery

- Mandrel without spindle flange/
without air sensing adapter
- Coupling ring
- Trimming sleeve for SAD segmented clamping bushings
- Mounting aid depending on size




STANDARD SEGMENTED MANDRELS

Mandrel MANDO

MANDO T812 size XS with flange. Technical data



Size	XS								
Clamping range [mm]	A	13 – 19							
Spindle nose	DU	A2-4	A2-5	A2-6	A2-8	AP120	AP140	AP170	AP220
Concentricity [mm]		0,025							
Max. radial clamping force [kN]		42							
Max. axial compression force [kN]		10							
Max. clamping length [mm]	AG	14,00							
Reserve stroke in Ø [mm]	D	0,25							
Release stroke in Ø [mm]	C	0,25							
RPM n max. [1/min.]		7000							
Reserve stroke axial [mm]	Q	1,50							
Release stroke axial [mm]	R	2,00							
Reception workpiece end-stop	FD	Ø 36 f7							
End-stop outer Ø [mm]	AZ	65							
End-stop outer Ø 2 [mm]	EM	42							
Bolt hole circle end-stop	B	LK Ø 53 [3 x M6]							
Length [mm]	H	47,5							
Length 2 [mm]	BS	99							
Total length [mm]	I	137		141		137			
Depth [mm]	BR	39,5							
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		140		150	
Outer Ø 2 [mm]	HD	139							
Air sensing control bolt hole circle-Ø [mm]	HQ	56							
Air sensing control bore Ø [mm]		3							
Central air sensing connection Ø optional [mm]		12 H7							
Weight [kg]		9	8,4	9,4	14,3	8,6	9,2	11	16,5

				
Flanges	Actuating units	Segmented clamping bushings	End-stop blanks	Air sensing adapter
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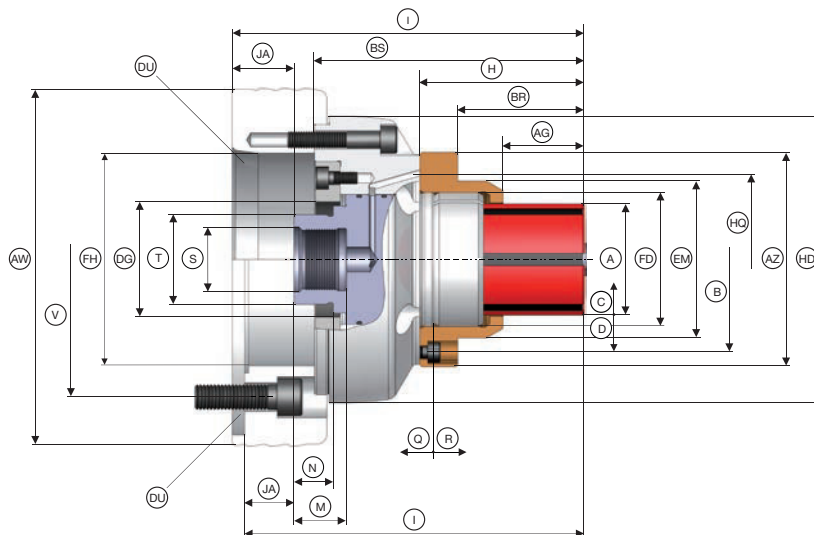
Scope of delivery

- Mandrel without spindle flange/
without air sensing adapter
- Coupling ring
- Trimming sleeve for SAD segmented clamping bushings
- Mounting aid depending on size

STANDARD SEGMENTED MANDRELS

Mandrel MANDO

MANDO T812 size S with flange. Technical data



Size	S							
Clamping range [mm]	A							
Spindle nose	DU							
	16 – 21							
	A2-4	A2-5	A2-6	A2-8	AP120	AP140	AP170	AP220
Concentricity [mm]	0,025							
Max. radial clamping force [kN]	42							
Max. axial compression force [kN]	10							
Max. clamping length [mm]	AG							
Reserve stroke in Ø [mm]	D							
Release stroke in Ø [mm]	C							
RPM n max. [1/min.]	7000							
Reserve stroke axial [mm]	Q							
Release stroke axial [mm]	R							
Reception workpiece end-stop	FD							
End-stop outer Ø [mm]	AZ							
End-stop outer Ø 2 [mm]	EM							
Bolt hole circle end-stop	B							
Length [mm]	H							
Length 2 [mm]	BS							
Total length [mm]	I							
Depth [mm]	BR							
Connecting thread inside	S							
Connecting thread outside	T							
Distance [mm]	JA							
Depth of thread [mm]	M							
Thread length [mm]	N							
Max. drawtube Ø [mm]	DG							
Minimum length of DG [mm]	FH							
Bore-Ø	V							
Bolt hole circle	AW							
Outer Ø [mm]	HD							
Outer Ø 2 [mm]	HQ							
Air sensing control bolt hole circle-Ø [mm]								
Air sensing control bore Ø [mm]								
Central air sensing connection Ø optional [mm]								
Weight [kg]								



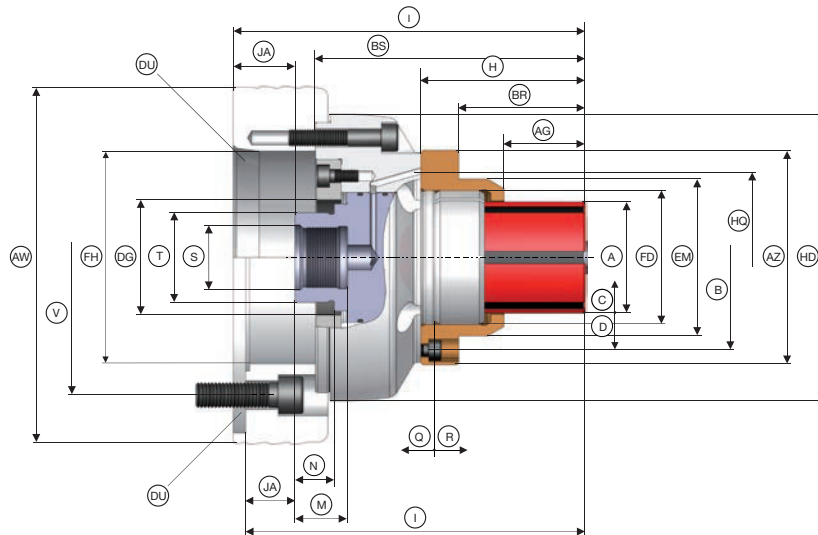
Scope of delivery

- Mandrel without spindle flange/ without air sensing adapter
- Coupling ring
- Trimming sleeve for SAD segmented clamping bushings
- Mounting aid depending on size

STANDARD SEGMENTED MANDRELS

Mandrel MANDO

MANDO T812 size 0 with flange. Technical data



Size	0								
Clamping range [mm]	A	20 – 28							
Spindle nose	DU	A2-4	A2-5	A2-6	A2-8	AP120	AP140	AP170	AP220
Concentricity [mm]		0,015							
Max. radial clamping force [kN]		42							
Max. axial compression force [kN]		10							
Max. clamping length [mm]	AG	21,00							
Reserve stroke in Ø [mm]	D	0,25							
Release stroke in Ø [mm]	C	0,25							
RPM n max. [1/min.]		7000							
Reserve stroke axial [mm]	Q	1,50							
Release stroke axial [mm]	R	2,00							
Reception workpiece end-stop	FD	Ø 47 f7							
End-stop outer Ø [mm]	AZ	90							
End-stop outer Ø 2 [mm]	EM	54							
Bolt hole circle end-stop	B	LK Ø 70 [3 x M6]							
Length [mm]	H	60,5							
Length 2 [mm]	BS	114							
Total length [mm]	I	152		156		152			
Depth [mm]	BR	51,5							
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		140		150	
Outer Ø 2 [mm]	HD	139							
Air sensing control bolt hole circle-Ø [mm]	HQ	70							
Air sensing control bore Ø [mm]		3							
Central air sensing connection Ø optional [mm]		12 H7							
Weight [kg]		9,9	9,3	10,3	15,2	9,5	10,1	11,9	17,4

Flanges	Actuating units	Segmented clamping bushings	End-stop blanks	Air sensing adapter
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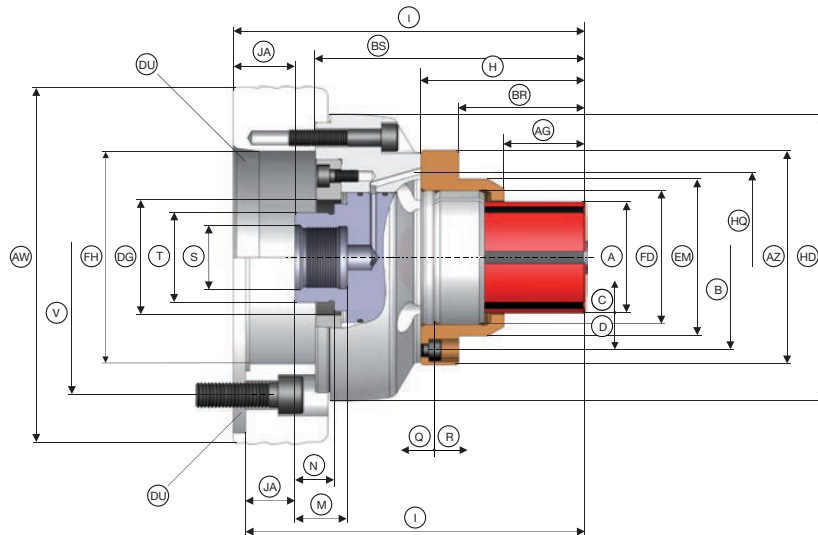
Scope of delivery

- Mandrel without spindle flange/ without air sensing adapter
- Coupling ring
- Trimming sleeve for SAD segmented clamping bushings
- Mounting aid depending on size

STANDARD SEGMENTED MANDRELS

Mandrel MANDO

MANDO T812 size 1 with flange. Technical data



Size	1							
Clamping range [mm]	A							
Spindle nose	DU							
	26 – 38							
	A2-4	A2-5	A2-6	A2-8	AP120	AP140	AP170	AP220
Concentricity [mm]	0,015							
Max. radial clamping force [kN]	42							
Max. axial compression force [kN]	10							
Max. clamping length [mm]	AG							
Reserve stroke in Ø [mm]	D							
Release stroke in Ø [mm]	C							
RPM n max. [1/min.]	7000							
Reserve stroke axial [mm]	Q							
Release stroke axial [mm]	R							
Reception workpiece end-stop	FD							
End-stop outer Ø [mm]	AZ							
End-stop outer Ø 2 [mm]	EM							
Bolt hole circle end-stop	B							
Length [mm]	H							
Length 2 [mm]	BS							
Total length [mm]	I							
Depth [mm]	BR							
Connecting thread inside	S							
Connecting thread outside	T							
Distance [mm]	JA							
Depth of thread [mm]	M							
Thread length [mm]	N							
Max. drawtube Ø [mm]	DG							
Minimum length of DG [mm]								
Bore-Ø	FH							
Bolt hole circle	V							
Outer Ø [mm]	AW							
Outer Ø 2 [mm]	HD							
Air sensing control bolt hole circle-Ø [mm]	HQ							
Air sensing control bore Ø [mm]								
Central air sensing connection Ø optional [mm]								
Weight [kg]								



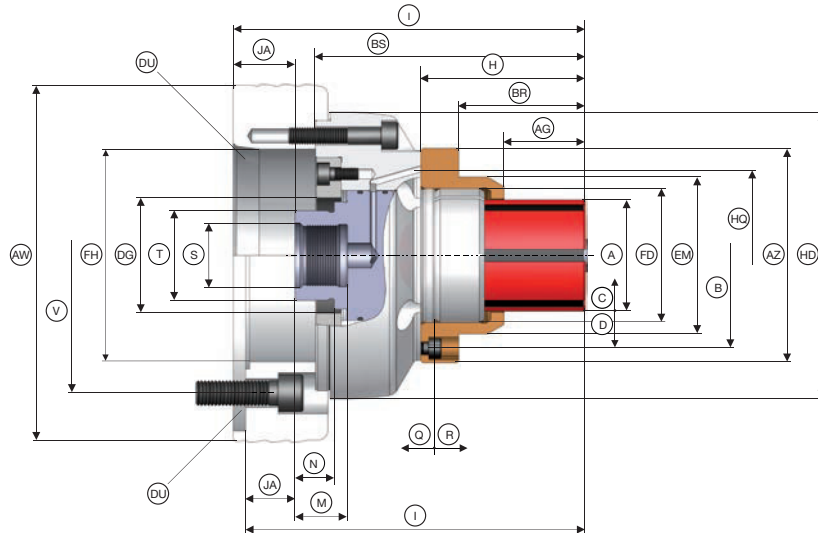
Scope of delivery

- Mandrel without spindle flange/ without air sensing adapter
- Coupling ring
- Trimming sleeve for SAD segmented clamping bushings
- Mounting aid depending on size



STANDARD SEGMENTED MANDRELS

Mandrel MANDO

MANDO T812 size 2 with flange. Technical data



Size	2								
Clamping range [mm]	A 36 – 54								
Spindle nose	DU	A2-4	A2-5	A2-6	A2-8	AP120	AP140	AP170	AP220
Concentricity [mm]		0,015							
Max. radial clamping force [kN]		85							
Max. axial compression force [kN]		20							
Max. clamping length [mm]	AG	40,00							
Reserve stroke in Ø [mm]	D	0,25							
Release stroke in Ø [mm]	C	0,25							
RPM n max. [1/min.]		7000							
Reserve stroke axial [mm]	Q	1,50							
Release stroke axial [mm]	R	2,50							
Reception workpiece end-stop	FD	Ø 65 f7							
End-stop outer Ø [mm]	AZ	104							
End-stop outer Ø 2 [mm]	EM	76							
Bolt hole circle end-stop	B	LK Ø 90 [3 x M6]							
Length [mm]	H	82,5							
Length 2 [mm]	BS	133,5							
Total length [mm]	I	172		176		172			
Depth [mm]	BR	73,5							
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	84							
Air sensing control bore Ø [mm]		3							
Central air sensing connection Ø optional [mm]		12 H7							
Weight [kg]		10,7	10	11	16	10,3	11	12,7	18,2

				
Flanges	Actuating units	Segmented clamping bushings	End-stop blanks	Air sensing adapter
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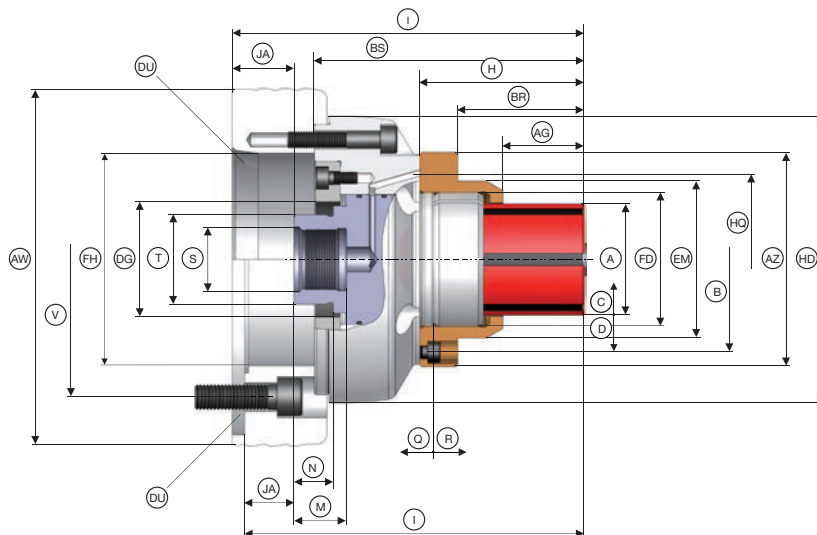
Scope of delivery

- Mandrel without spindle flange/
without air sensing adapter
- Coupling ring
- Trimming sleeve for SAD segmented clamping bushings
- Mounting aid depending on size

STANDARD SEGMENTED MANDRELS

Mandrel MANDO

MANDO T812 size 3 with flange. Technical data



Size	3								
Clamping range [mm]	A	50 – 80							
Spindle nose	DU	A2-4	A2-5	A2-6	A2-8	AP120	AP140	AP170	AP220
Concentricity [mm]		0,015							
Max. radial clamping force [kN]		105							
Max. axial compression force [kN]		25							
Max. clamping length [mm]	AG	44,50							
Reserve stroke in Ø [mm]	D	0,35							
Release stroke in Ø [mm]	C	0,35							
RPM n max. [1/min.]		6000							
Reserve stroke axial [mm]	Q	2,00							
Release stroke axial [mm]	R	2,50							
Reception workpiece end-stop	FD	Ø 83 f7							
End-stop outer Ø [mm]	AZ	120							
End-stop outer Ø 2 [mm]	EM	105							
Bolt hole circle end-stop	B	LK Ø 104 [3 x M6]							
Length [mm]	H	89,5							
Length 2 [mm]	BS	141,5							
Total length [mm]	I	179		183		179			
Depth [mm]	BR	80,0							
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		140		150	
Outer Ø 2 [mm]	HD	139							
Air sensing control bolt hole circle-Ø [mm]	HQ	100							
Air sensing control bore Ø [mm]		3							
Central air sensing connection Ø optional [mm]		12 H7							
Weight [kg]		11,8	11,2	12,2	17	11,4	12	13,8	19,3



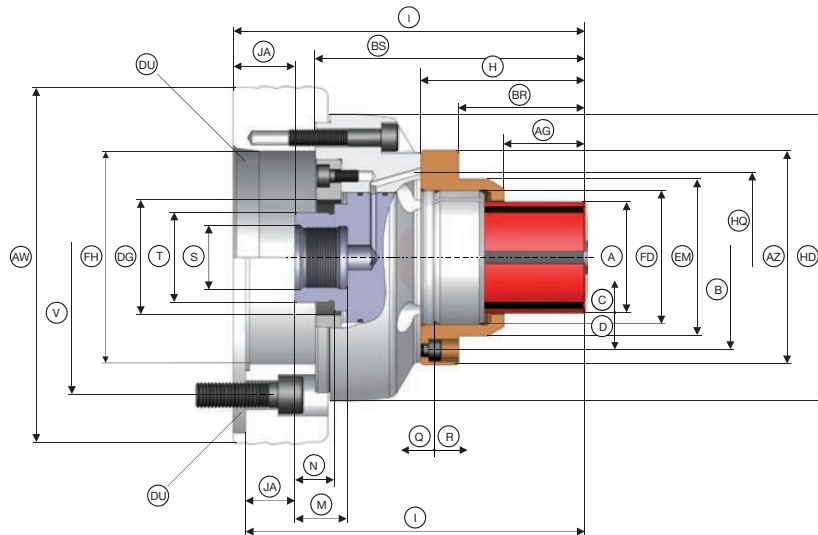
Scope of delivery

- Mandrel without spindle flange/
without air sensing adapter
- Coupling ring
- Trimming sleeve for SAD segmented clamping bushings
- Mounting aid depending on size


STANDARD SEGMENTED MANDRELS

Mandrel MANDO

MANDO T812 size 4 with flange. Technical data



Size	4								
Clamping range [mm]	A	69 – 100							
Spindle nose	DU	A2-4	A2-5	A2-6	A2-8	AP120	AP140	AP170	AP220
Concentricity [mm]		0,015							
Max. radial clamping force [kN]		150							
Max. axial compression force [kN]		35							
Max. clamping length [mm]	AG	52,50							
Reserve stroke in Ø [mm]	D	0,40							
Release stroke in Ø [mm]	C	0,40							
RPM n max. [1/min.]		6000							
Reserve stroke axial [mm]	Q	2,50							
Release stroke axial [mm]	R	3,00							
Reception workpiece end-stop	FD	Ø 103 f7							
End-stop outer Ø [mm]	AZ	138							
End-stop outer Ø 2 [mm]	EM	124							
Bolt hole circle end-stop	B	LK Ø 124 [3 x M6]							
Length [mm]	H	100							
Length 2 [mm]	BS	151,5							
Total length [mm]	I	189		193		189			
Depth [mm]	BR	90,5							
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		140		150	
Outer Ø 2 [mm]	HD	139							
Air sensing control bolt hole-Ø [mm]	HQ	116							
Air sensing control bore Ø [mm]		3							
Central air sensing connection Ø optional [mm]		12 H7							
Weight [kg]		13,2	12,6	13,6	18,5	12,8	13,4	15,2	20,7

				
Flanges	Actuating units	Segmented clamping bushings	End-stop blanks	Air sensing adapter
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Scope of delivery

- Mandrel without spindle flange/
without air sensing adapter
- Coupling ring
- Trimming sleeve for SAD segmented clamping bushings
- Mounting aid depending on size