



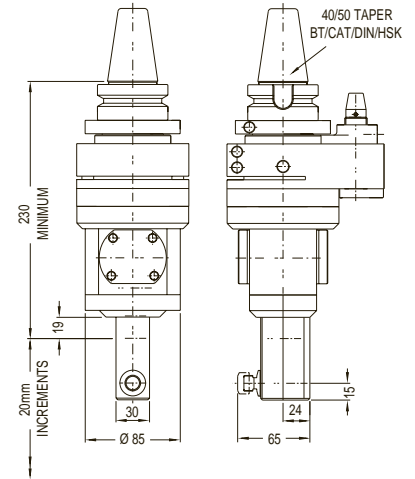
RAD 190

EXTENDED LONG REACH NARROW RIGHT ANGLE MILL/DRILL/TAP

RAD 190 - 11

Able to be extended in 20mm increments

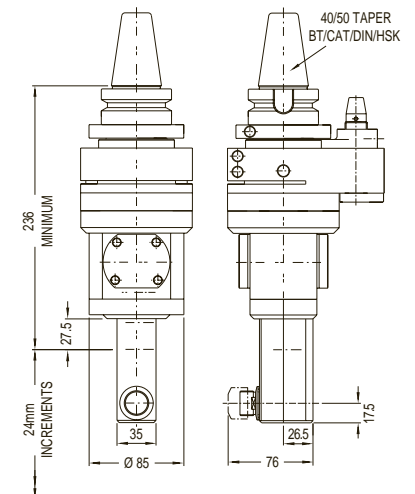
Max. speed	3,500 rpm
Max. tool shank dia.	7 mm / 1/4"
Max. tapping size	M5 / 6-32
Nm max.	6
Ratio	1.2:1 increase
Tool holding	Collet chuck ER11



RAD 190 - 16

Able to be extended in 24mm increments

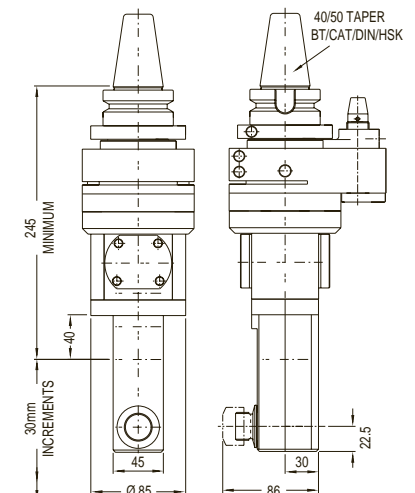
Max. speed	3,500 rpm
Max. tool shank dia.	10 mm / 3/8"
Max. tapping size	M6 / 1/4"
Nm max.	8
Ratio	1:1
Tool holding	Collet chuck ER16



RAD 190 - 20

Able to be extended in 30mm increments

Max. speed	3,500 rpm
Max. tool shank dia.	13 mm / 1/2"
Max. tapping size	M10 / 3/8"
Nm max.	15
Ratio	1.25:1 reduction
Tool holding	Collet chuck ER20



The RAD 190 right angle head evolved from the large number of special long reach units made by Centreline to get down into the hard to reach areas of components. Designed with a ground helical gear drive from the spiral bevel gear set to the collet spindle, the design enables the unit to be readily extended by Centreline to meet your special needs. Available with BT/CT/DIN/HSK taper drives.

RAD 190 - Gauge line to centre of spindle

Increments	- 11	- 16	- 20
/0	230	236	245
/1	250	260	275
/2	270	284	305
/3	290	308	335
/4	310	332	365
/5	330	356	395
/6	-	380	425
/7	-	404	455
/8	-	-	485
/9	-	-	515