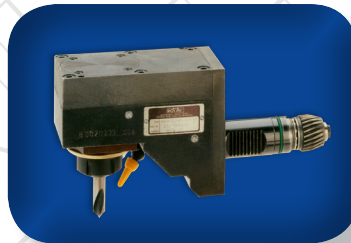
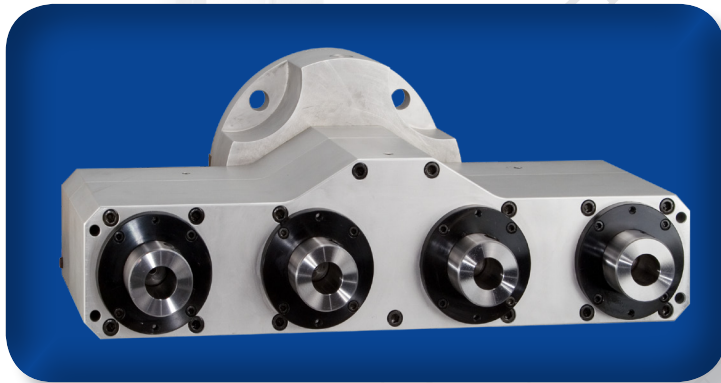




NXT GENERATION ANGLE HEADS



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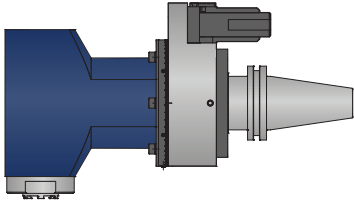
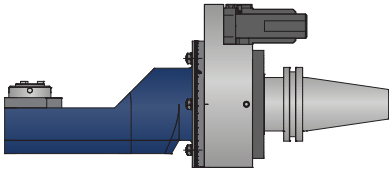
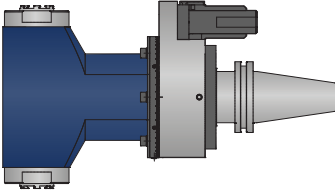
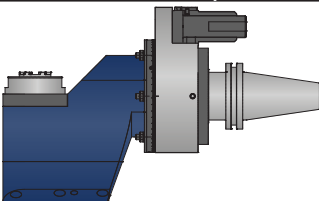
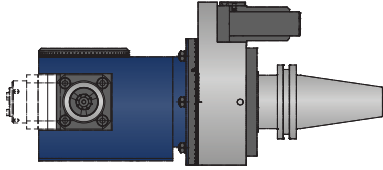
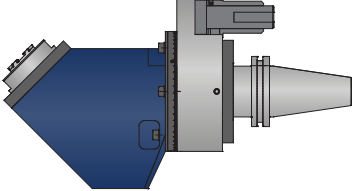
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ANGLE HEADS



S 90° ANGLE HEADS	SIZE	RATIO	OUTPUT*	SHANK*
	4	1:1	ER-16	BT 30
	5	1:1	ER-20A	40/50 Taper
	6	1:1	ER-25	40/50 Taper
	7	1:1	ER-32	40/50 Taper
	10	1:1	ER-40	50 Taper
	20	1:1	ER-50	50 Taper
	30	1:1	ER-50	50 Taper
G EXTENDED LENGTH 90° ANGLE HEADS	SIZE	RATIO	OUTPUT*	SHANK*
	5	1:1	ER-20A	40/50 Taper
	6	1:1	ER-25	40/50 Taper
	7	1:1	ER-32	40/50 Taper
	10	1:1	ER-40	50 Taper
	20	1:1	ER-50	50 Taper
	30	1:1	ER-50	50 Taper
	S-2 DUAL OUTPUT 90° ANGLE HEADS	SIZE	RATIO	OUTPUT*
	5	1:1	ER-20A	40/50 Taper
	6	1:1	ER-25	40/50 Taper
	7	1:1	ER-32	40/50 Taper
	10	1:1	ER-40	50 Taper
	20	1:1	ER-50	50 Taper
	30	1:1	ER-50	50 Taper
	W OFFSET 90° ANGLE HEADS (COOLANT OPTIONAL)	SIZE	RATIO	OUTPUT*
	5	1:1	ER-20A	40/50 Taper
	6	1:1	ER-25	40/50 Taper
	7	1:1	ER-32	40/50 Taper
	10	1:1	ER-40	50 Taper
	20	1:1	ER-50	50 Taper
	30	1:1	ER-50	50 Taper
	D ADJUSTABLE ANGLE HEADS (COOLANT OPTIONAL)	SIZE	RATIO	OUTPUT*
	5	1:1	ER-20A	40/50 Taper
	6	1:1	ER-25	40/50 Taper
	7	1:1	ER-32	40/50 Taper
	10	1:1	ER-40	50 Taper
	20	1:1	ER-50	50 Taper
	30	1:1	ER-50	50 Taper
	F CUSTOM FIXED ANGLE HEADS (COOLANT OPTIONAL)	SIZE	RATIO	OUTPUT*
	5	1:1	ER-20A	40/50 Taper
	6	1:1	ER-25	40/50 Taper
	7	1:1	ER-32	40/50 Taper
	10	1:1	ER-40	50 Taper
	20	1:1	ER-50	50 Taper
	30	1:1	ER-50	50 Taper

*Tools available with other outputs & shanks (BT, HSK, etc.) • Dimensions: millimeters

“S” SERIES ANGLE HEADS

For machining tasks without geometric constraints. Internal coolant optional.

S 90° ANGLE HEADS		Tool	S4	S5	S6	S7	S10	S20	S30
	OUTPUT	ER-16	ER-20A	ER-25	ER-32	ER-40	ER-50	ER-50	ER-50
	SHANK	BT30	40/50	40/50	40/50	50	50	50	50
	Nm/ft.lbs.	1.5/1.1	15/11.1	43/31.7	70/51.6	120/88.4	250/184.3	500/368.5	500/368.5
	RPM	8,000	8,000	8,000	8,000	6,000	3,000	2,000	2,000
	kg/lbs.	3/6.6	4/8.8	6/13.2	10/22	13/28.6	19/41.8	35/77	35/77
	1	40	42	64	64	80	99	110	110
	2	20	21	32	32	34	45	55	55
	3	85	85	105	105	125	160	180	180
	4	18	18	18	18	18	18	18	18
	5	65	65/80	65/80	65/80	110	110	130	130
6	130	150	200	200	200	200	250	250	
7	60	83	97	98	116	120	120	120	
8	35	43	60	61	63	84	100	100	
9	39	59	95	95	95	90	140	140	

“G” SERIES ANGLE HEADS

For special machining tasks with strong geometric constraints. Set-back output to maximize the usable tool length. Internal coolant optional.

G EXTENDED LENGTH 90° ANGLE HEADS		Tool	G5	G6	G7	G10	G20	G30
	OUTPUT	ER-20A	ER-25	ER-32	ER-40	ER-50	ER-50	ER-50
	SHANK	40/50	40/50	40/50	50	50	50	50
	Nm/ft.lbs.	15/11.1	43/31.7	70/51.6	120/88.4	250/184.3	500/368.5	500/368.5
	RPM	8,000	6,000	4,000	4,000	3,000	2,000	2,000
	kg/lbs.	6/13.2	8/17.6	12/26.4	16/35.2	23/50.6	36/79.2	36/79.2
	1	60	70	80	90	110	130	130
	2	45	55	65	80	99	119	119
	3	85	105	105	125	160	180	180
	4	18	18	18	18	18	18	18
	5	65/80	65/80	65/80	110	110	130	130
6	230	240	250	290	330	380	380	
7	21	25	32	40	45	55	55	
8	42	50	60	98	113	140	140	
9	57	65	77	94	99	135	135	
10	130	138	146	185	220	270	270	

“S-2” SERIES ANGLE HEADS

For machining tasks in opposite direction or with different machining tools. Internal coolant optional.

S-2 DUAL OUTPUT 90° ANGLE HEADS		Tool	S5-2	S6-2	S7-2	S10-2	S20-2	S30-2
	OUTPUT	ER-20A	ER-25	ER-32	ER-40	ER-50	ER-50	
	SHANK	40/50	40/50	40/50	50	50	50	
	Nm/ft. lbs	15/11.1	43/31.7	70/51.6	120/88.4	250/184.3	500/368.5	
	RPM	8,000	8,000	8,000	6,000	3,000	2,000	
	kg/lbs.	4/8.8	6/13.2	10/22	13/28.6	19/41.8	35/77	
	1	42	64	64	80	99	110	
	2	21	32	32	34	45	55	
	3	85	105	105	125	160	180	
	4	18	18	18	18	18	18	
	5	65/80	65/80	65/80	110	110	130	
6	150	200	200	200	200	250		
7	55	67	75	87	107	120		
8	55	67	75	87	107	120		
9	59	95	95	95	90	140		

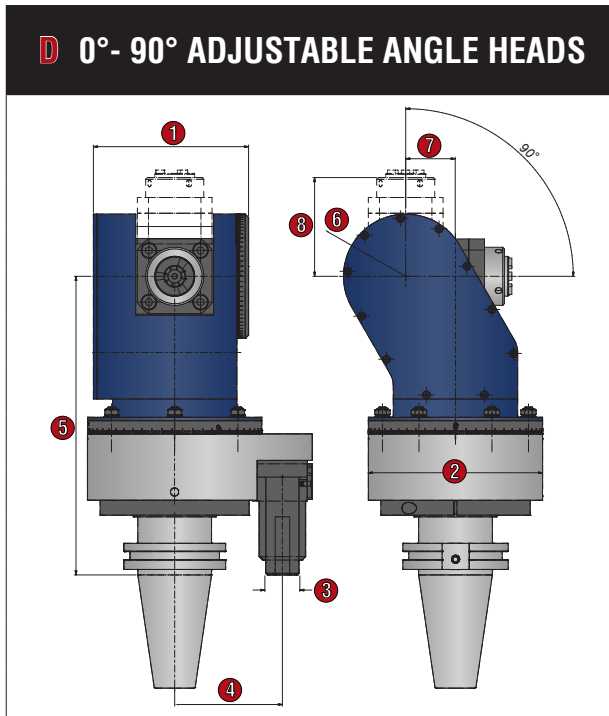
“W” SERIES ANGLE HEADS

For machining tasks with geometric constraints. Set-back output to maximize the usable tool length. Internal coolant standard, can be omitted optionally.

W OFFSET 90° ANGLE HEADS		Tool	W5	W6	W7	W10	W20	W30
	OUTPUT	ER-20A	ER-25	ER-32	ER-40	ER-50	ER-50	
	SHANK	40/50	40/50	40/50	50	50	50	
	Nm/ft. lbs	15/11.1	43/31.7	70/51.6	120/88.4	250/184.3	500/368.5	
	RPM	8,000	8,000	8,000	6,000	3,000	2,000	
	kg/lbs.	7/15.4	9/19.8	10/22	15/33	20/44	30/66	
	1	60	65	70	90	110	140	
	2	85	105	105	125	160	180	
	3	18	18	18	18	18	18	
	4	65/80	65/80	65/80	110	110	130	
	5	180	200	200	245	260	280	
6	26	30	37	45	50	60		
7	63	75	84	100	125	150		
8	17	20	25	28	30	35		
9	74	85	96	140	150	170		

“D” SERIES ANGLE HEADS

For machining tasks in a changing, angular position. Because of the variable adjustment, arbitrary angles between 0°-90° (process reliable) can be set. Up to 110° optional. Internal coolant standard, can be omitted optionally.

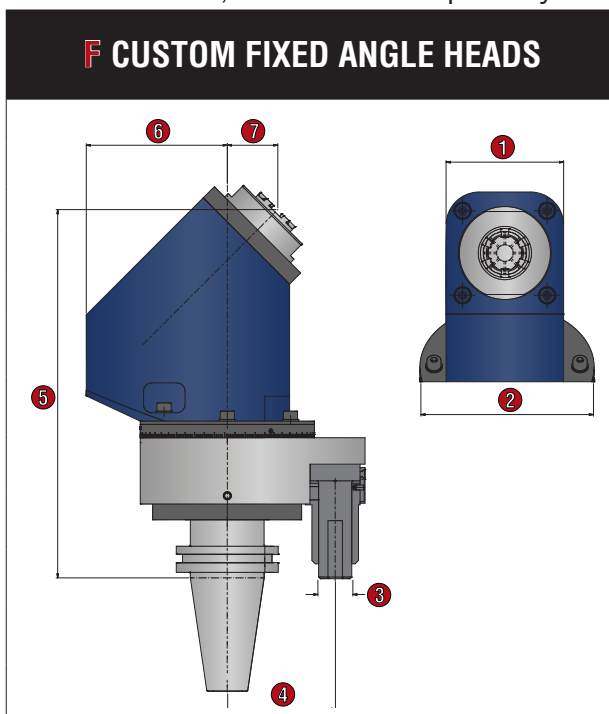


D 0° - 90° ADJUSTABLE ANGLE HEADS

Tool	D5	D6	D7	D10	D20	D30
OUTPUT	ER-20A	ER-25	ER-32	ER-40	ER-50	ER-50
SHANK	40/50	40/50	40/50	50	50	50
Nm/ft. lbs	15/11.1	43/31.7	70/51.6	120/88.4	250/184.3	500/368.5
RPM	8,000	6,000	4,000	4,000	3,000	2,000
kg/lbs.	8/17.6	12/26.4	16/35.2	20/44	28/61.6	41/90.2
1	94	125	130	135	195	190
2	85	105	105	125	160	180
3	18	18	18	18	18	18
4	65/80	65/80	65/80	110	110	130
5	180	200	200	225	250	280
6	38	41	50	55	80	110
7	30	38	40	43	60	75
8	60	80	85	90	100	120

“F” SERIES ANGLE HEADS

For special machining tasks in a fixed angular position. Internal coolant standard, can be omitted optionally.



F CUSTOM FIXED ANGLE HEADS

Tool	F5	F6	F7	F10	F20	F30
OUTPUT	ER-20A	ER-25	ER-32	ER-40	ER-50	ER-50
SHANK	40/50	40/50	40/50	50	50	50
Nm/ft. lbs	15/11.1	43/31.7	70/51.6	120/88.4	250/184.3	500/368.5
RPM	8,000	6,000	4,000	4,000	3,000	2,000
kg/lbs.	6/13.2	7/15.4	8/17.6	15/33	20/44	35/77
1	42	64	64	80	99	110
2	85	105	105	125	160	180
3	18	18	18	18	18	18
4	65/80	65/80	65/80	110	110	130
5	200	210	215	250	300	350
6	90	90	95	105	120	140
7	45	45	50	55	65	75

Date _____

Dealer Company: _____

End User Company: _____

Contact: _____

Contact: _____

Address: _____

Address: _____

City: _____ State: _____ Zip Code: _____

City: _____ State: _____ Zip Code: _____

E-mail: _____

E-mail: _____

Phone #: _____ Cell #: _____

Phone #: _____ Cell #: _____

1. Machine Information: HMC VMC Make: _____ Model: _____

Taper: CAT 40 CAT 50 BT 40 BT 50 HSK 63 HSK 100 Other: _____

Tool Changer Specs: Max Weight: _____ Max Diameter: _____ Max Length: _____

2. Application Information:

Milling: End Mill Dia.: _____ # of Flutes / Inserts: _____

Drilling: Drill Dia.: _____

Depth of Cut: _____ Width of Cut: _____

RPM: _____ IPM: _____

RPM: _____ IPM: _____ Material: _____

Material: _____

Notes:

3. Head Information:

Style of Head: Fixed 90° 0° - 90° Adjustable

Output: ER _____ Weldon _____ Arbor _____

Special Fixed Angle _____ Dual Output

HSK _____ 40 Taper 50 Taper

Extended Length _____ Tool Changed

Specialty: _____

Hand Load Flange Mount

Smart Change _____ W&F _____

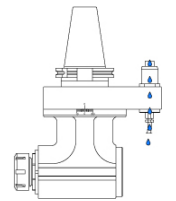
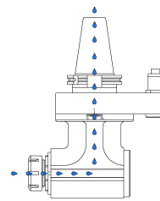
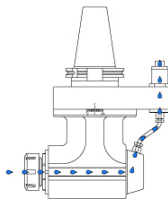
Coolant:

Through Orientation Pin

Through Input Spindle

Through Retaining Block

Coolant Required



Pressure: _____

Notes:



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ROTARY TABLES | ANGLE HEADS | LIVE TOOLS | SWISS TOOLS | TOOL PRESETTERS