

DRIVEN and STATIC TOOLING
For
SAUTER



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Spring 2013

Live Tooling



M. T. Marchetti, a major live tool manufacturer in northern Italy, is a leader in live tool technology. The formula is simple. Use only the best angular contact high-speed bearings available. Add to this an exacting tolerances for all ground shafts, gears and bearing pocket features. Next, develop a sealed system that **will not** allow any contamination from chips or coolant.

Top this all off with a superior design and you end up with a live tool that is more rigid, faster and will last longer. **We back this up with a 2-Year factory warranty.**

Our Live Tool Warranty

Our tooling will give years of service in the most demanding applications. The superior design and rugged construction has proven this over the last 12 years. The reliability of our tools allows us to provide a 2-year factory warranty.

MD TOOLING will repair any defective tool holders for a period of 2 years from the date of purchase.

Product Range

We have the largest range of live tooling available for most major machine tool manufactures.

Our available products include an extensive line of standard live tooling as well as specialty toolholders such as 0-90 and 0-180 adjustable angle tool holders, gear hobbors, and even worm gear generators. Our product range includes geared up holders to 60,000 RPM and are engineered for 1,000 PSI coolant through.

We are an industry leader in providing complete tooling solutions with hundreds of static tool options as well.

Technical Support

Here at MD Tooling we have a full technical support department with over 25 years of CNC experience.

Our highly qualified staff can help with part processing, tooling up a job from a blue print and even assist with part programming. Applications Engineers are always available by phone to answer any questions you may have about our tooling or any other CNC related issue.

Stock and Replenishment

MD Tooling maintains an extensive inventory of tooling in our warehouse in Michigan. Our current "fi II" rate on orders is 93% from our stock in Michigan for same day shipping.

Should you require a non-stock item, our manufacturer, M.T. Marchetti also maintains a large inventory in Italy. Tooling can be obtained in as little as 3-5 business days.

Shipping

MD Tooling realizes that when you need tooling, often you can't wait until the next day. We process orders and ship from available stock right up until 5PM EST to make certain we get your tooling solutions to you as quickly as possible.

We regularly ship throughout the day via DHL, UPS, FedEx or any other carrier that a customer requests.



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- Fast, Friendly, Reliable Service!
- Quality tooling at highly competitive pricing.
- 2-Year Warranty on all live tools.
- Extensive inventory. We currently ship over 93% of all orders same day.
- In-house repair services available.
- If a warranty tool needs to be returned for inspection, service or repair, loaner tools are available to keep you up and running.
- More specialty tool holders than any other manufacturer.
- Custom tool holders available.
- All available tooling may not be shown in this catalog. If you can't find the holder you're looking for, please contact this office for assistance.



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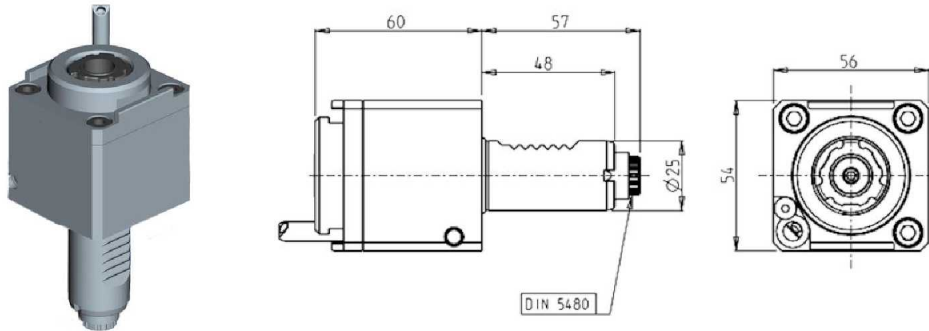
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VDI25 DIN 5480

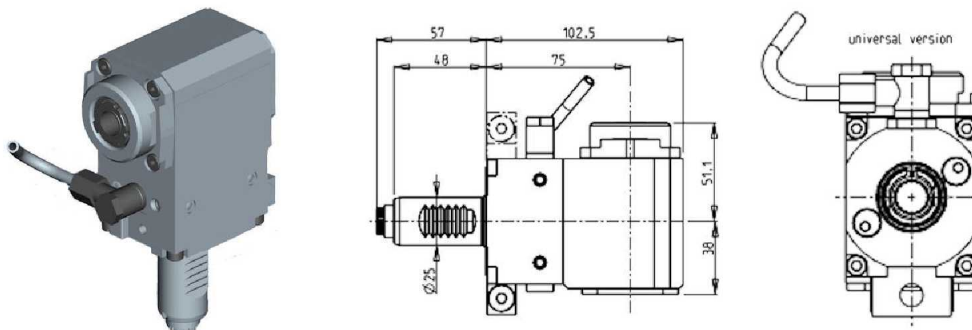
DRIVEN

AXIAL DRIVEN TOOL VDI25 DIN 5480



PartNumber	Description	Spindle	I	RPM	Ext. Coolant
SAU0390320	Axial Driven ERA20 VDI25 DIN5480	ERA20	1:1	6000	X

RADIAL DRIVEN TOOL VDI25 DIN 5480

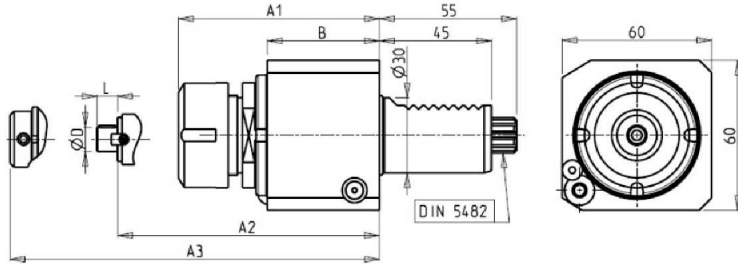
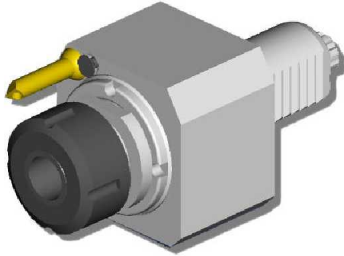


PartNumber	Description	Spindle	I	RPM	Ext. Coolant
SAU0402320	Radial Driven ERA20 VDI25 DIN5480	ERA20	1:1	6000	X

VDI30 DIN 5482

DRIVEN

AXIAL DRIVEN TOOL VDI30 DIN 5482



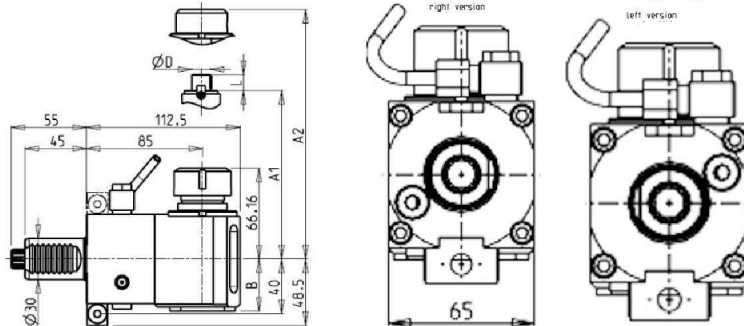
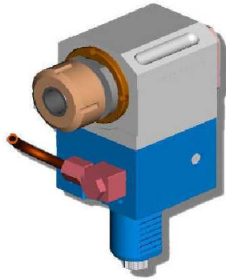
PartNumber	Description	Spindle	I	RPM	Coolant Thru	Ext Coolant	A1	A2	A3	B	D	L
SAU0170125	Axial ER25 VDI30 DIN5482	ER25	1:1	6000		X	80.66			56		
SAU0170225	Axial ER25A VDI30 DIN5482	ER25A	1:1	6000		X	70.03			45		
SAU0171125	Axial ER25 VDI30 DIN5482 Coolant Thru*	ER25	1:1	6000	X	X	94.66			59		
SAU0171225	Axial ER25A VDI30 DIN5482 Coolant Thru*	ER25A	1:1	6000	X	X	84.03			59		
SAU0170416	Mill Head D=16, L=17 VDI30 DIN5482	16x17	1:1	6000		X		59.5		45	16	17
SAU0170422	Mill Head D=22, L=19 VDI30 DIN5482	22x19	1:1	6000		X		61.5		45	22	19
SAU0170316	Axial Weldon 16 VDI30 DIN5482	Weldon 16	1:1	6000		X				66.5	45	
SAU0171316	Axial Weldon 16 VDI30 DIN5482 Coolant Thru*	Weldon 16	1:1	6000	X	X				80	59	

* Coolant Thru tools are designed for 1000 psi.
They require 5 Micron Filtration and **CANNOT** be run dry.

VDI30 DIN 5482

DRIVEN

RADIAL DRIVEN TOOL VDI30 DIN 5482



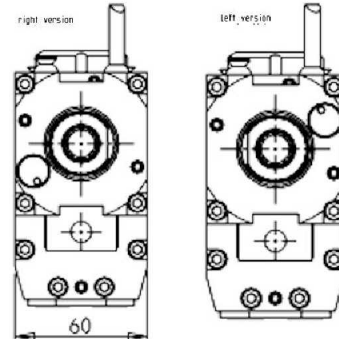
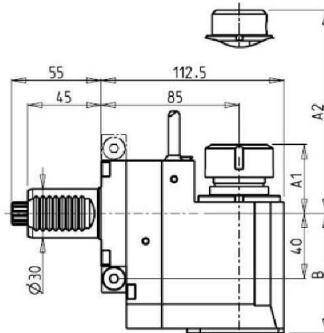
PartNumber	Description	Orient.	Spindle	RPM	Coolant Thru	Ext Coolant	A1	A2	B	D	L
SAU0180125	Radial ER25 RH H85	Right	ER25	6000		X			38		
SAU0180225	Radial ER25 RH H85 Coolant Thru*	Right	ER25	6000	X	X			48		
SAU0180416	Radial Mill Head D=16, L=17 RH H85	Right	16x17	6000		X	45		38	16	17
SAU0180422	Radial Mill Head D=22, L=19 RH H85	Right	22x19	6000		X	47		38	22	19
SAU0180316	Radial Weldon 16 RH H85	Right	Weldon 16	6000		X		54.5	38		
SAU0181125	Radial ER25 LH H85	Left	ER25	6000		X			38		
SAU0181225	Radial ER25 LH H85 Coolant Thru*	Left	ER25	6000	X	X			48		
SAU0181416	Radial Mill Head D=16, L=17 LH H85	Left	16x17	6000		X	45		38	16	17
SAU0181422	Radial Mill Head D=22, L=19 LH H85	Left	22x19	6000		X	47		38	22	19
SAU0181316	Radial Weldon 16 LH H85	Left	Weldon 16	6000		X		54.5	38		

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VDI30 DIN 5482

DRIVEN

RADIAL REAR-SET DRIVEN TOOL VDI30 DIN 5482 H-75



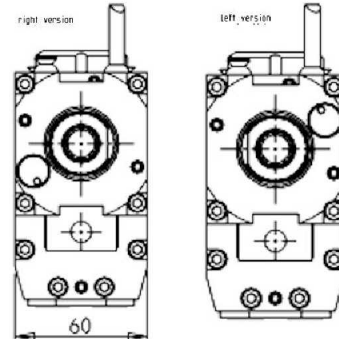
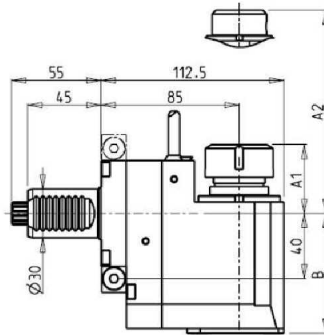
PartNumber	Description	Orient.	Spindle	I	RPM	Coolant Thru	Ext Coolant	A1	A2	B
SAU0200120	Radial Rear-set ER20 RH H75	Right	ER20	1:1	6000		X	41.16		73.5
SAU0200125	Radial Rear-set ER25 RH H75	Right	ER25	1:1	6000		X	42.16		73.5
SAU0200225	Radial Rear-set ER25 RH H75 Coolant Thru*	Right	ER25	1:1	6000	X	X	42.16		83.5
SAU0200325	Radial Rear-set ER25A RH H75	Right	ER25A	1:1	6000		X	28.5		73.5
SAU0200425	Radial Rear-set ER25A RH H75 Coolant Thru*	Right	ER25A	1:1	6000	X	X	28.5		83.5
SAU0200516	Radial Rear-set Weldon 16 RH H75	Right	Weldon 16	1:1	6000		X		27.5	73.5
SAU0201125	Radial Rear-set ER25 LH H75	Left	ER25	1:1	6000		X	42.16		73.5
SAU0201225	Radial Rear-set ER25 LH H75 Coolant Thru*	Left	ER25	1:1	6000	X	X	42.16		83.5
SAU0201325	Radial Rear-set ER25A LH H75	Left	ER25A	1:1	6000		X	28.5		73.5
SAU0201425	Radial Rear-set ER25A LH H75 Coolant Thru*	Left	ER25A	1:1	6000	X	X	28.5		83.5
SAU0201120	Radial Rear-set ER20 LH H75	Left	ER20	1:1	6000		X	41.16		73.5
SAU0201516	Radial Rear-set Weldon 16 LH H75	Left	Weldon 16	1:1	6000		X		27.5	73.5

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VDI30 DIN 5482

DRIVEN

RADIAL REAR-SET DRIVEN TOOL VDI30 DIN 5482 H-85



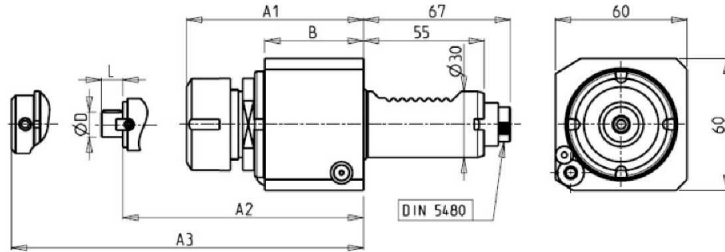
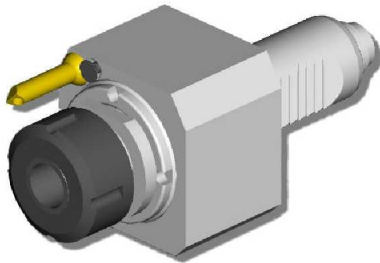
PartNumber	Description	Orient.	Spindle	I	RPM	Coolant Thru	Ext Coolant	A1	A2	B
SAU0210120	Radial Rear-set ER20 RH H85	Right	ER20	1:1	6000		X	41.16		73.5
SAU0210125	Radial Rear-set ER25 RH H85	Right	ER25	1:1	6000		X	42.16		73.5
SAU0210225	Radial Rear-set ER25 RH H85 Coolant Thru*	Right	ER25	1:1	6000	X	X	42.16		83.5
SAU0210325	Radial Rear-set ER25A RH H85	Right	ER25A	1:1	6000		X	28.5		73.5
SAU0210425	Radial Rear-set ER25A RH H85 Coolant Thru*	Right	ER25A	1:1	6000	X	X	28.5		83.5
SAU0210516	Radial Rear-set Weldon 16 RH H85	Right	Weldon 16	1:1	6000		X		27.5	73.5
SAU0211120	Radial Rear-set ER20 LH H85	Left	ER20	1:1	6000		X	41.16		73.5
SAU0211125	Radial Rear-set ER25 LH H85	Left	ER25	1:1	6000		X	42.16		73.5
SAU0211225	Radial Rear-set ER25 LH H85 Coolant Thru*	Left	ER25	1:1	6000	X	X	42.16		83.5
SAU0211325	Radial Rear-set ER25A LH H85	Left	ER25A	1:1	6000		X	28.5		73.5
SAU0211425	Radial Rear-set ER25A LH H85 Coolant Thru*	Left	ER25A	1:1	6000	X	X	28.5		83.5
SAU0211516	Radial Rear-set Weldon 16 LH H85	Left	Weldon 16	1:1	6000		X		27.5	73.5

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VDI30 DIN 5480

DRIVEN

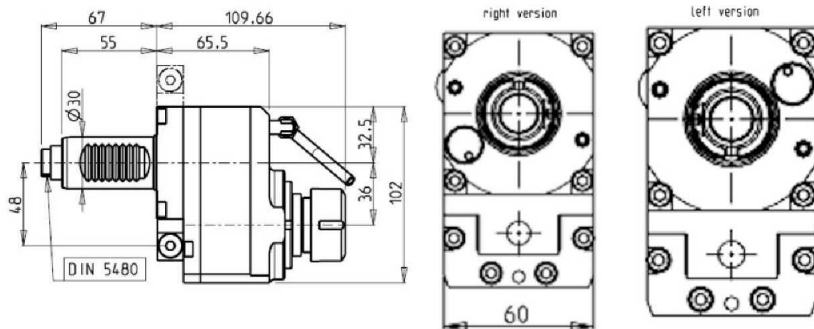
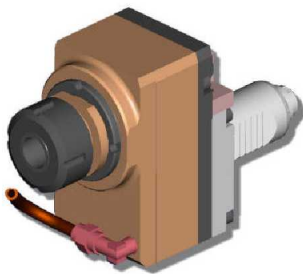
AXIAL DRIVEN TOOL VDI30 DIN 5480



PartNumber	Description	Spindle	I	RPM	Coolant Thru	Ext Coolant	A1	A2	A3	B	D	L
SAU0070125	Axial ER25 VDI30 DIN5480	ER25	1:1	6000		X	80.66			45		
SAU0071125	Axial ER25 VDI30 DIN5480 Coolant Thru*	ER25	1:1	6000	X	X	94.66			59		
SAU0070225	Axial ER25A VDI30 DIN5480	ER25A	1:1	6000		X	61			45		
SAU0071225	Axial ER25A VDI30 DIN5480 Coolant Thru*	ER25A	1:1	6000	X	X	84.03			59		
SAU0070316	Axial Weldon 16 VDI30 DIN5480	Weldon 16	1:1	6000		X			66.5	56		
SAU0071316	Axial Weldon 16 VDI30 DIN5480 Coolant Thru*	Weldon 16	1:1	6000	X	X			80	70		
SAU0070416	Mill Head D=16, L=17 VDI30 DIN5480	16x17	1:1	6000		X		59.5		56	16	17
SAU0070422	Mill Head D=22, L=19 VDI30 DIN5480	22x19	1:1	6000		X		61.5		56	22	19

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GEARED DOWN AXIAL REDIRECTED DRIVEN TOOL VDI30 DIN 5480

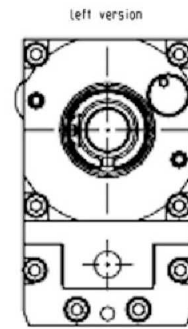
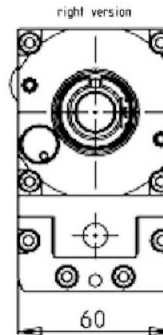
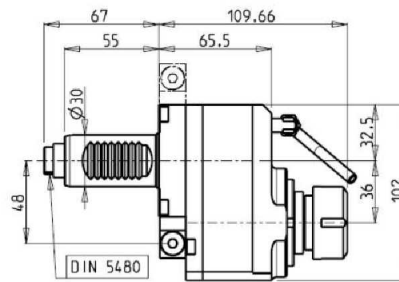
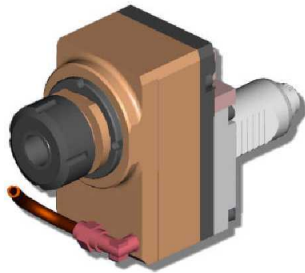


PartNumber	Description	Orient.	Spindle	I	RPM	Ext Coolant
SAU0100325	Axial Geared Down ER25 RH	Right	ER25	2:1	3000	X
SAU0101325	Axial Geared Down ER25 LH	Left	ER25	2:1	3000	X

VDI30 DIN 5480

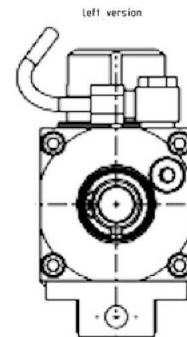
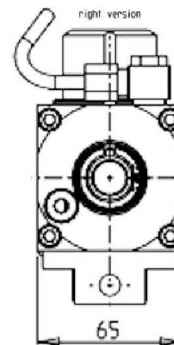
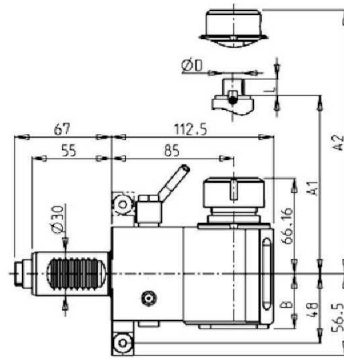
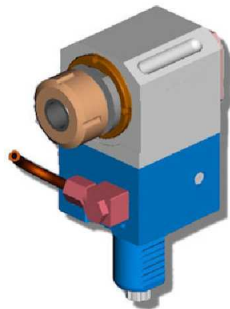
DRIVEN

GEARED UP AXIAL REDIRECTED DRIVEN TOOL VDI30 DIN 5480



PartNumber	Description	Orient.	Spindle	I	RPM	Ext Coolant
SAU0100225	Axial Geared Up ER25 RH	Right	ER25	1:2	12000	X
SAU0101225	Axial Geared Up ER25 LH	Left	ER25	1:2	12000	X

RADIAL DRIVEN TOOL VDI30 DIN 5480 H=85



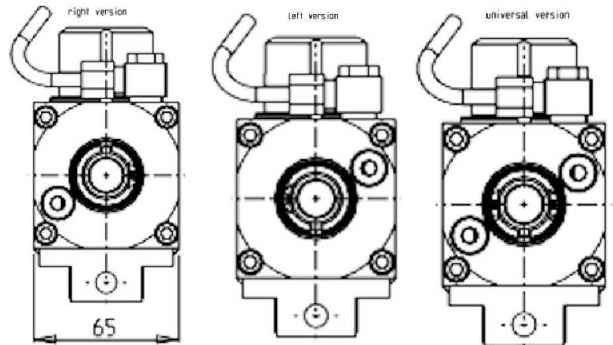
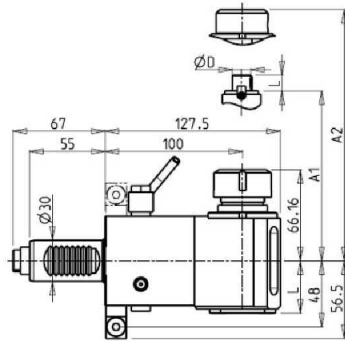
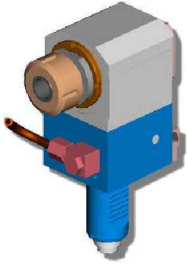
PartNumber	Description	Orient.	Spindle	I	RPM	Cool Thru	Ext Cool	A1	A2	B	D	L
SAU0080125	Radial ER25 RH H85	Right	ER25	1:1	6000		X			38		
SAU0080225	Radial ER25 RH H85 Coolant Thru*	Right	ER25	1:1	6000	X	X			48		
SAU0080416	Radial Mill Head D=16, L=17 RH H85	Right	16x17	1:1	6000		X	45		38	16	17
SAU0080422	Radial Mill Head D=22, L=19 RH H85	Right	22x19	1:1	6000		X	47		38	22	19
SAU0080316	Radial Weldon 16 RH H75	Right	Weldon 16	1:1	6000		X		54.5	38		
SAU0081125	Radial ER25 LH H85	Left	ER25	1:1	6000		X			38		
SAU0081225	Radial ER25 LH H85 Coolant Thru*	Left	ER25	1:1	6000	X	X			48		
SAU0081416	Radial Mill Head D=16, L=17 LH H85	Left	16x17	1:1	6000		X	45		38	16	17
SAU0081422	Radial Mill Head D=22, L=19 LH H85	Left	22x19	1:1	6000		X	47		38	22	19
SAU0081316	Radial Weldon 16 LH H85	Left	Weldon 16	1:1	6000		X		54.5	38		

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VDI30 DIN 5480

DRIVEN

RADIAL DRIVEN TOOL VDI30 DIN 5480 H=100



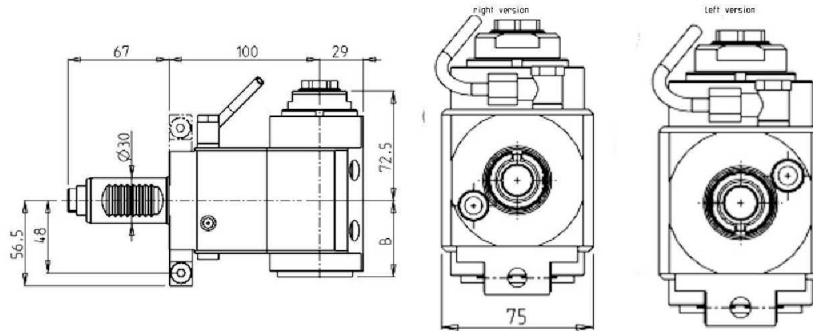
PartNumber	Description	Orient.	Spindle	I	RPM	Cool Thru	Ext Cool	A1	A2	B	D	L
SAU0160125	Radial ER25 RH H100	Right	ER25	1:1	6000		X			38		
SAU0160225	Radial ER25 RH H100 Coolant Thru*	Right	ER25	1:1	6000	X	X			48		
SAU0160416	Radial Mill Head D=16, L=17 RH H100	Right	16x17	1:1	6000		X	45		38	16	17
SAU0160422	Radial Mill Head D=22, L=19 RH H100	Right	22x19	1:1	6000		X	47		38	22	19
SAU0160316	Radial Weldon 16 RH H100	Right	Weldon 16	1:1	6000		X		54.5	38		
SAU0161125	Radial ER25 LH H100	Left	ER25	1:1	6000		X			38		
SAU0161225	Radial ER25 LH H100 Coolant Thru*	Left	ER25	1:1	6000	X	X			48		
SAU0161416	Radial Mill Head D=16, L=17 LH H100	Left	16x17	1:1	6000		X	45		38	16	17
SAU0161422	Radial Mill Head D=22, L=19 LH H100	Left	22x19	1:1	6000		X	47		38	22	19
SAU0161316	Radial Weldon 16 LH H100	Left	Weldon 16	1:1	6000		X		54.5	38		
SAU0162125	Radial ER25 Univ. H100	Universal	ER25	1:1	6000		X			38		
SAU0162225	Radial ER25 Univ. H100 Coolant Thru*	Universal	ER25	1:1	6000	X	X			48		
SAU0162416	Radial Mill Head D=16, L=17 Univ. H100	Universal	16x17	1:1	6000		X	45		38	16	17
SAU0162422	Radial Mill Head D=22, L=19 Univ. H100	Universal	22x19	1:1	6000		X	47		38	22	19
SAU0162316	Radial Weldon Univeral H100	Universal	Weldon 16	1:1	6000		X		54.5	38		

* Coolant Thru tools are designed for 1000 psi.
They require 5 Micron Filtration and **CANNOT** be run dry.

VDI30 DIN 5480

DRIVEN

RADIAL GEARED UP 1:2 DRIVEN TOOL VDI30 DIN 5480



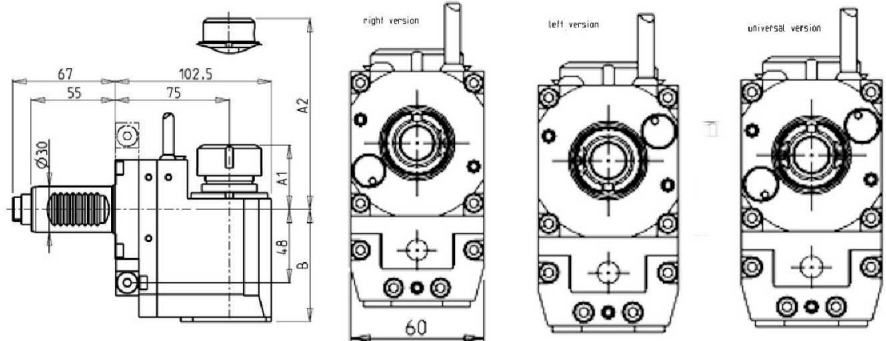
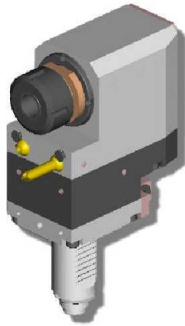
PartNumber	Description	Spindle	I	RPM	Coolant Thru	Ext Coolant	B
SAU0340120	Radial Geared-Up RH1:2 ERA20	ERA20	1:2	12000		X	50.5
SAU0341120	Radial Geared-Up LH1:2 ERA20	ERA20	1:2	12000		X	50.5
SAU0340220	Radial Geared-Up RH1:2 ERA20 Coolant Thru*	ERA20	1:2	12000	X	X	58.5
SAU0341220	Radial Geared-Up LH1:2 ERA20 Coolant Thru*	ERA20	1:2	12000	X	X	58.5

* Coolant Thru tools are designed for 1000 psi.
They require 5 Micron Filtration and **CANNOT** be run dry.

VDI30 DIN 5480

DRIVEN

RADIAL REAR-SET DRIVEN TOOL VDI30 DIN 5480 H-75



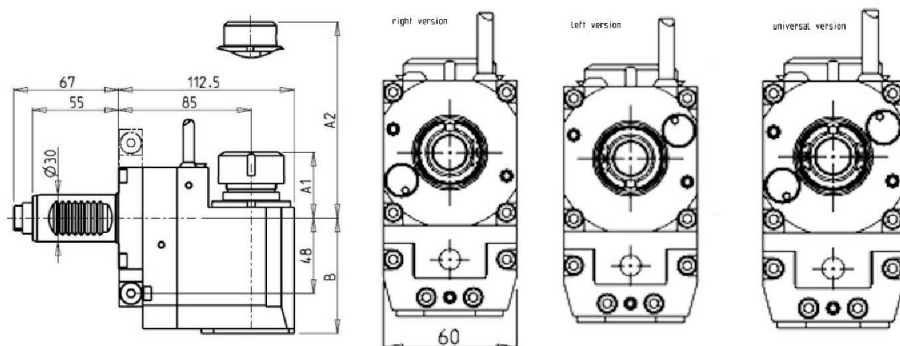
PartNumber	Description	Orient.	Spindle	I	RPM	Coolant Thru	Ext Coolant	A1	A2	B
SAU0090120	Radial Rear-set ER20 RH H75	Right	ER20	1:1	6000		X	41.16		73.5
SAU0090125	Radial Rear-set ER25 RH H75	Right	ER25	1:1	6000		X	42.16		73.5
SAU0090325	Radial Rear-set ER25A RH H75	Right	ER25A	1:1	6000		X	28.5		73.5
SAU0090225	Radial Rear-set ER25 RH H75 Coolant Thru*	Right	ER25	1:1	6000	X	X	42.16		83.5
SAU0090425	Radial Rear-set ER25A RH H75 Coolant Thru*	Right	ER25A	1:1	6000	X	X	28.5		83.5
SAU0090516	Radial Rear-set Weldon 16 RH H75	Right	Weldon 16	1:1	6000		X		27.5	73.5
SAU0091120	Radial Rear-set ER20 LH H75	Left	ER20	1:1	6000		X	41.16		73.5
SAU0091125	Radial Rear-set ER25 LH H75	Left	ER25	1:1	6000		X	42.16		73.5
SAU0091325	Radial Rear-set ER25A LH H75	Left	ER25A	1:1	6000		X	28.5		73.5
SAU0091225	Radial Rear-set ER25 LH H75 Coolant Thru*	Left	ER25	1:1	6000	X	X	42.16		83.5
SAU0091425	Radial Rear-set ER25A LH H75 Coolant Thru*	Left	ER25A	1:1	6000	X	X	28.5		83.5
SAU0091516	Radial Rear-set Weldon 16 LH H75	Left	Weldon 16	1:1	6000		X		27.5	73.5
SAU0092120	Radial Rear-set ER20 Univ. H75	Universal	ER20	1:1	6000		X	41.16		73.5
SAU0092125	Radial Rear-set ER25 Univ. H75	Universal	ER25	1:1	6000		X	42.16		73.5
SAU0092325	Radial Rear-set ER25A Univ. H75	Universal	ER25A	1:1	6000		X	28.5		73.5
SAU0092225	Radial Rear-set ER25 Univ. H75 Coolant Thru*	Universal	ER25	1:1	6000	X	X	42.16		83.5
SAU0092425	Radial Rear-set ER25A Univ. H75 Coolant Thru*	Universal	ER25A	1:1	6000	X	X	28.5		83.5
SAU0092516	Radial Rear-set Weldon16 Univ. H75	Universal	Weldon 16	1:1	6000		X		27.5	73.5

* Coolant Thru tools are designed for 1000 psi.
They require 5 Micron Filtration and **CANNOT** be run dry.

VDI30 DIN 5480

DRIVEN

RADIAL REAR-SET DRIVEN TOOL VDI30 DIN 5480 H-85



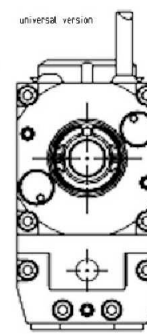
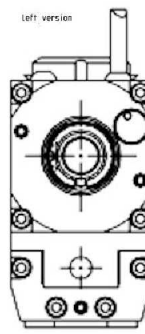
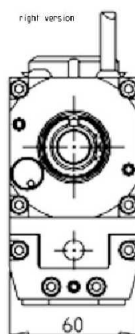
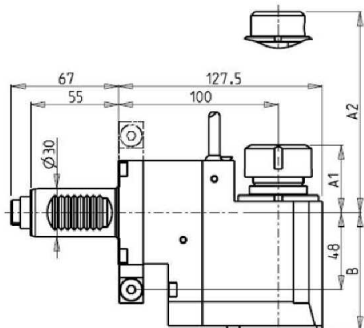
PartNumber	Description	Orient.	Spindle	I	RPM	Coolant Thru	Ext Coolant	A1	A2	B
SAU0130120	Radial Rear-set ER20 RH H85	Right	ER20	1:1	6000		X	41.16		73.5
SAU0130125	Radial Rear-set ER25 RH H85	Right	ER25	1:1	6000		X	42.16		73.5
SAU0130225	Radial Rear-set ER25 RH H85 Coolant Thru*	Right	ER25	1:1	6000	X	X	42.16		83.5
SAU0130325	Radial Rear-set ER25A RH H85	Right	ER25A	1:1	6000		X	28.5		73.5
SAU0130425	Radial Rear-set ER25A RH H85 Coolant Thru*	Right	ER25A	1:1	6000	X	X	28.5		83.5
SAU0130516	Radial Rear-set Weldon 16 RH H85	Right	Weldon 16	1:1	6000		X		27.5	73.5
SAU0131120	Radial Rear-set ER20 LH H85	Left	ER20	1:1	6000		X	41.16		73.5
SAU0131225	Radial Rear-set ER25 LH H85 Coolant Thru*	Left	ER25	1:1	6000	X	X	42.16		83.5
SAU0131125	Radial Rear-set ER25 LH H85	Left	ER25	1:1	6000		X	42.16		73.5
SAU0131325	Radial Rear-set ER25A LH H85	Left	ER25A	1:1	6000		X	28.5		73.5
SAU0131425	Radial Rear-set ER25A LH H85 Coolant Thru*	Left	ER25A	1:1	6000	X	X	28.5		83.5
SAU0131516	Radial Rear-set Weldon 16 LH H85	Left	Weldon 16	1:1	6000		X		27.5	73.5
SAU0132120	Radial Rear-set ER20 Univ. H85	Universal	ER20	1:1	6000		X	41.16		73.5
SAU0132125	Radial Rear-set ER25 Univ. H85	Universal	ER25	1:1	6000		X	42.16		73.5
SAU0132225	Radial Rear-set ER25 Univ. H85 Coolant Thru*	Universal	ER25	1:1	6000	X	X	42.16		83.5
SAU0132325	Radial Rear-set ER25A Univ. H85	Universal	ER25A	1:1	6000		X	28.5		73.5
SAU0132425	Radial Rear-set ER25A Univ. H85 Coolant Thru*	Universal	ER25A	1:1	6000	X	X	28.5		83.5
SAU0132516	Radial Rear-set Weldon 16 Univ. H85	Universal	Weldon 16	1:1	6000		X		27.5	73.5

* Coolant Thru tools are designed for 1000 psi.
They require 5 Micron Filtration and **CANNOT** be run dry.

VDI30 DIN 5480

DRIVEN

RADIAL REAR-SET DRIVEN TOOL VDI30 DIN 5480 H-100



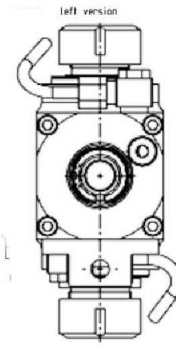
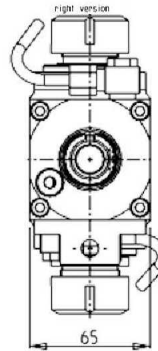
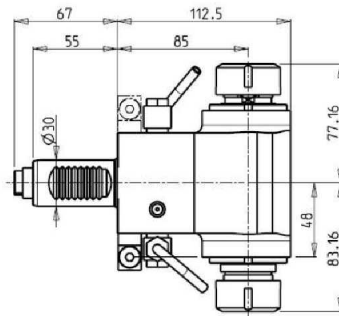
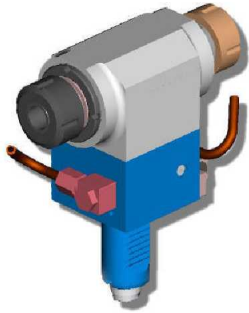
PartNumber	Description	Orient.	Spindle	I	RPM	Coolant Thru	Ext Coolant	A1	A2	B
SAU0140120	Radial Rear-set ER20 RH H100	Right	ER25	1:1	6000		X	41.16	73.5	
SAU0140125	Radial Rear-set ER25 RH H100	Right	ER25	1:1	6000		X	42.16	73.5	
SAU0140325	Radial Rear-set ER25A RH H100	Right	ER25A	1:1	6000		X	28.5	73.5	
SAU0140225	Radial Rear-set ER25 RH H100 Coolant Thru*	Right	ER25	1:1	6000	X	X	42.16	83.5	
SAU0140425	Radial Rear-set ER25A RH H100 Coolant Thru*	Right	ER25A	1:1	6000	X	X	28.5	83.5	
SAU0140516	Radial Rear-set Weldon 16 RH H100	Right	Weldon 16	1:1	6000		X		27.5	73.5
SAU0141120	Radial Rear-set ER20 LH H100	Left	ER20	1:1	6000		X	41.16	73.5	
SAU0141125	Radial Rear-set ER25 LH H100	Left	ER25	1:1	6000		X	42.16	73.5	
SAU0141325	Radial Rear-set ER25A LH H100	Left	ER25A	1:1	6000		X	28.5	73.5	
SAU0141225	Radial Rear-set ER25 LH H100 Coolant Thru*	Left	ER25	1:1	6000	X	X	42.16	83.5	
SAU0141425	Radial Rear-set ER25A LH H100 Coolant Thru*	Left	ER25A	1:1	6000	X	X	28.5	83.5	
SAU0141516	Radial Rear-set Weldon 16 LH H100	Left	Weldon 16	1:1	6000		X		27.5	73.5
SAU0142120	Radial Rear-set ER20 Univ. H100	Universal	ER20	1:1	6000		X	41.16	73.5	
SAU0142125	Radial Rear-set ER25 Univ. H100	Universal	ER25	1:1	6000		X	42.16	73.5	
SAU0142325	Radial Rear-set ER25A Univ. H100	Universal	ER25A	1:1	6000		X	28.5	73.5	
SAU0142225	Radial Rear-set ER25 Univ. H100 Coolant Thru*	Universal	ER25	1:1	6000	X	X	42.16	83.5	
SAU0142425	Radial Rear-set ER25A Univ. H100 Coolant Thru*	Universal	ER25A	1:1	6000	X	X	28.5	83.5	
SAU0142516	Radial Rear-set Weldon 16 Univ. H100	Universal	Weldon 16	1:1	6000		X		27.5	73.5

* Coolant Thru tools are designed for 1000 psi.
They require 5 Micron Filtration and **CANNOT** be run dry.

VDI30 DIN 5480

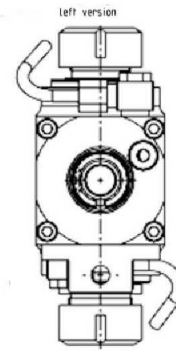
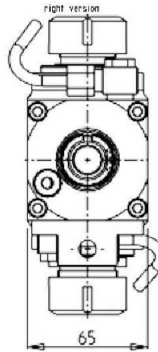
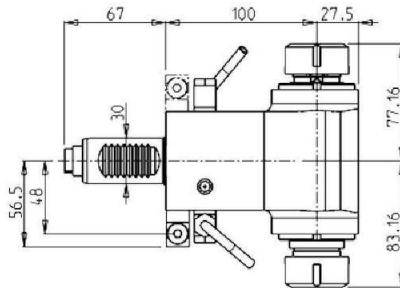
DRIVEN

OPPOSITE FACE RADIAL DRIVEN TOOL VDI30 DIN 5480 H-85



PartNumber	Description	Orient.	Spindle	I	RPM	Ext Coolant
SAU0110225	Opposite Face ER25/ER25 RH H85	Right	ER25+ER25	1:1	6000	X
SAU0111225	Opposite Face ER25/ER25 LH H85	Left	ER25+ER25	1:1	6000	X

OPPOSITE FACE RADIAL TWIN DRIVEN TOOL VDI30 DIN 5480 H-100

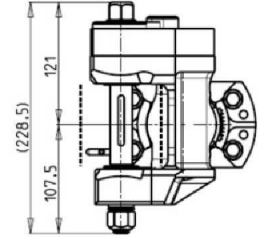
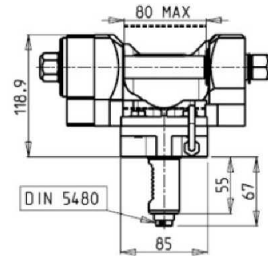
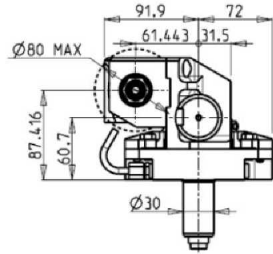
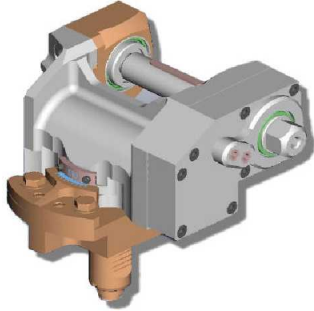


PartNumber	Description	Spindle	I	RPM	Ext Coolant
SAU0360225	Opposite Face Radial Twin RH Driven H=100	ER25-ER25	1:1	6000	X
SAU0361225	Opposite Face Radial Twin LH Driven H=100	ER25-ER25	1:1	6000	X

VDI30 DIN 5480

DRIVEN

GEAR HOBBER VDI30 DIN 5480



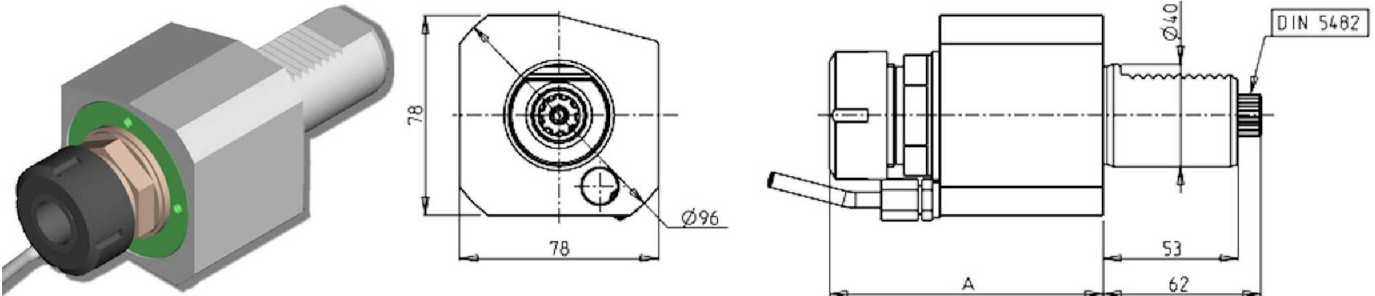
PartNumber	Description	I	RPM	Ext Coolant	D mm	D Inch
SAU0021100	Gear Hobber	1:1	6000	X	16-22-27-32	3/4"-1"-1 1/4"
SAU0022100	Gear Hobber 2:1	2:1	3000	X	16-22-27-32	3/4"-1"-1 1/4"

Note : Wrenches are provided with the purchase of Specialty Toolholders

VDI40 DIN 5482

DRIVEN

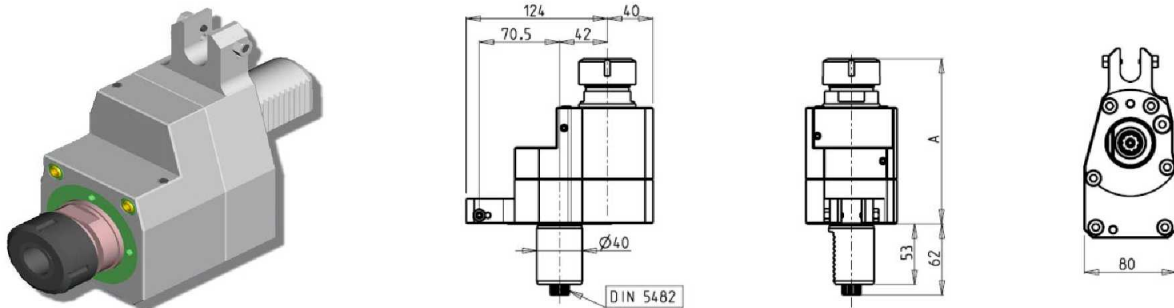
AXIAL DRIVEN TOOL VDI40 DIN 5482



PartNumber	Description	Spindle	I	RPM	Coolant Thru	Ext Coolant	A	A1
202SAU_A32_40D00	Axial ER32 VDI40 DIN5482	ER32	1:1	4000		X		97.3
202SAU_A32_40D10	Axial ER32 VDI40 DIN5482 Coolant Thru*	ER32	1:1	4000	X	X	110.46	
SAU0460420	Axial Weldon 20 VDI40 DIN5482	Weldon 20	1:1	4000		X	107.26	

* Coolant Thru tools are designed for 1000 psi.
They require 5 Micron Filtration and **CANNOT** be run dry.

AXIAL REDIRECTED DRIVEN TOOL VDI40 DIN 5482



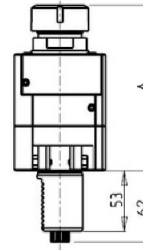
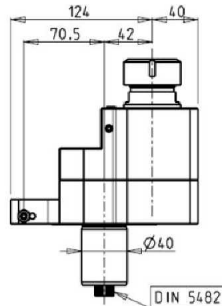
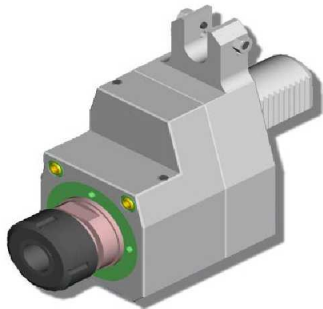
PartNumber	Description	Spindle	I	RPM	Coolant Thru	Ext Coolant	A
205SAU_A32_40D00	Axial Redirected ER32 VDI40 DIN5482	ER32	1:1	4000		X	144.46
205SAU_A32_40D10	Axial Redirected ER32 VDI40 DIN5482 Coolant Thru*	ER32	1:1	4000	X		164.96

* Coolant Thru tools are designed for 1000 psi.
They require 5 Micron Filtration and **CANNOT** be run dry.

VDI40 DIN 5482

DRIVEN

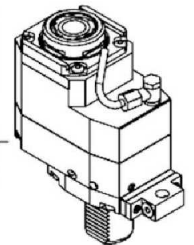
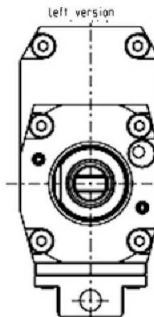
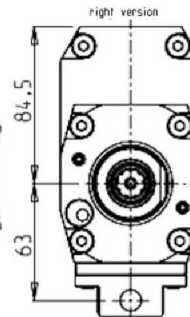
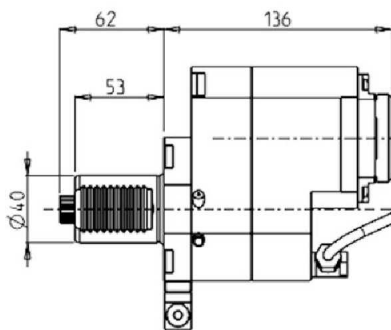
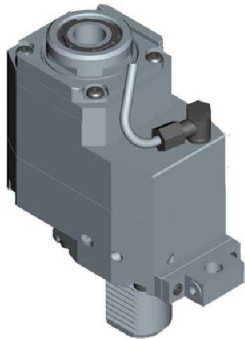
AXIAL GEARED DOWN REDIRECTED DRIVEN TOOL VDI40 DIN 5482



PartNumber	Description	Spindle	I	RPM	Coolant Thru	Ext Coolant	A
205SAU_A32_40D20	Axial Geared Down Redirected ER32	ER32	2:1	2000		X	144.46
205SAU_A32_40D30	Axial Geared Down Redirected ER32 Coolant Thru*	ER32	2:1	2000	X		164.96

* Coolant Thru tools are designed for 1000 psi.
They require 5 Micron Filtration and **CANNOT** be run dry.

AXIAL GEARED-UP I=1:2 DRIVEN TOOL RE-DIRECTED B Y 42mm VDI40



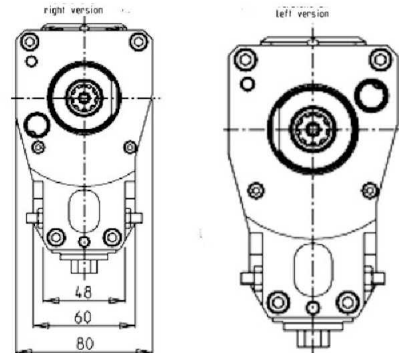
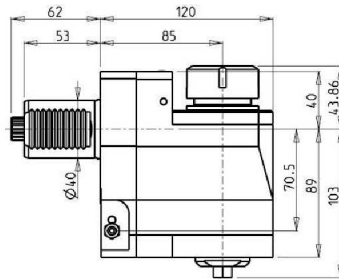
PartNumber	Description	Spindle	I	RPM	Coolant Thru	Ext. Coolant
SAU0446132	Axial Geared-Up Re-Directed ERA32 RH	ERA32	1:2	8000		X
SAU0446232	Axial Geared-Up Re-Directed ERA32 RH Coolant Thru*	ERA32	1:2	8000	X	X
SAU0447132	Axial Geared-Up Re-Directed ERA32 LH	ERA32	1:2	8000		X
SAU0447232	Axial Geared-Up Re-Directed ERA32 LH Coolant Thru*	ERA32	1:2	8000	X	X

* Coolant Thru tools are designed for 1000 psi.
They require 5 Micron Filtration and **CANNOT** be run dry.

VDI40 DIN 5482

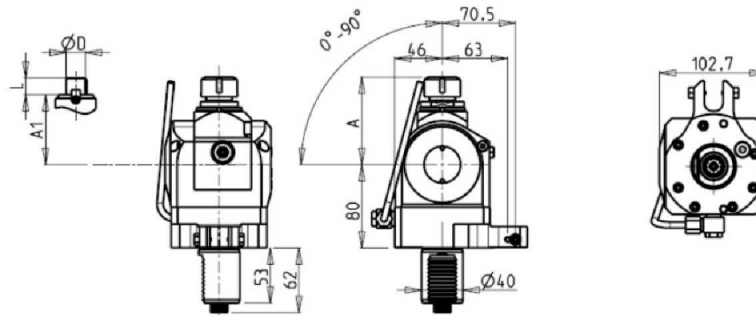
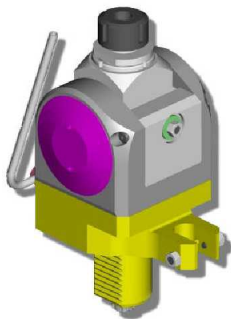
DRIVEN

RADIAL REAR-SET DRIVEN TOOL VDI40 DIN 5482 H-85



PartNumber	Description	Orient.	Spindle	I	RPM	Ext Coolant
201SAU_R32_40D00	Radial Rear-set ER32 RH H85	Right	ER32	1:1	4000	X
201SAU_R32_40D20	Radial Rear-set ER32 LH H85	Left	ER32	1:1	4000	X

0-90 ADJUSTABLE ANGLE VDI40 DIN 5482



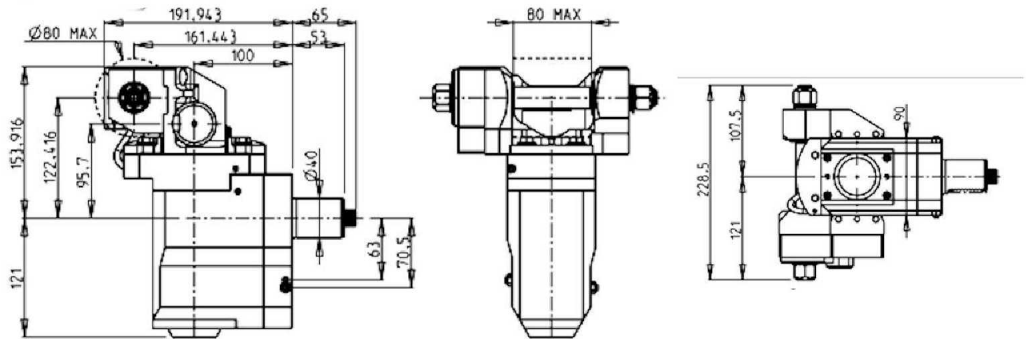
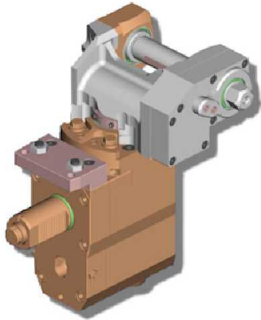
PartNumber	Description	Orient.	Spindle	I	RPM	Ext Coolant	A	A1	D	L
0210020_SAU	0-90 Adj Angle ER20	Right	ER20	1:1	4000	X	84.16			
0210025_SAU	0-90 Adj Angle ER25	Right	ER25	1:1	4000	X	85.66			
0211617_SAU	0-90 Adj Angle Mill Head D=16, L=17	Right	16x17	1:1	4000	X		65	16	17
0212219_SAU	0-90 Adj Angle Mill Head D=22, L=19	Right	22x19	1:1	4000	X		66	22	19
0211905_SAU	0-90 Adj Angle Mill Head D=3/4", L=3/4"	Right	3/4x3/4	1:1	4000	X		65	3/4"	3/4"

Note : Wrenches are provided with the purchase of Specialty Toolholders

VDI40 DIN 5482

DRIVEN

GEAR HOBBER VDI40 DIN 5482



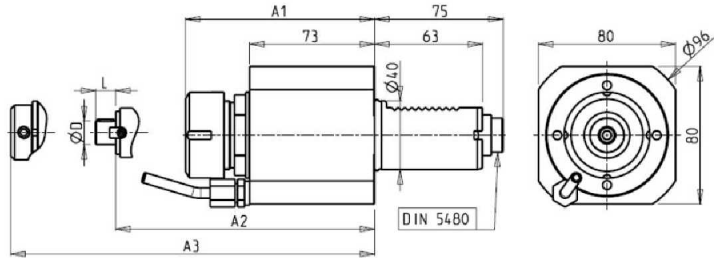
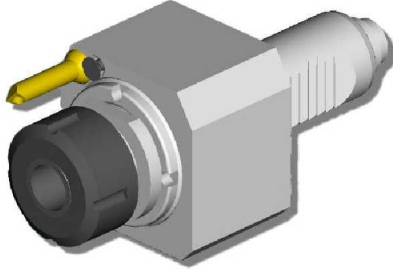
PartNumber	Description	I	RPM	Ext Coolant	D mm	D Inch
SAU0331100	Gear Hobber	1:1	6000	X	16-22-27-32	3/4"-1"-1 1/4"
SAU0332100	Gear Hobber 2:1	2:1	3000	X	16-22-27-32	3/4"-1"-1 1/4"

Note : Wrenches are provided with the purchase of Specialty Toolholders

VDI40 DIN 5480

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AXIAL DRIVEN TOOL VDI40 DIN 5480



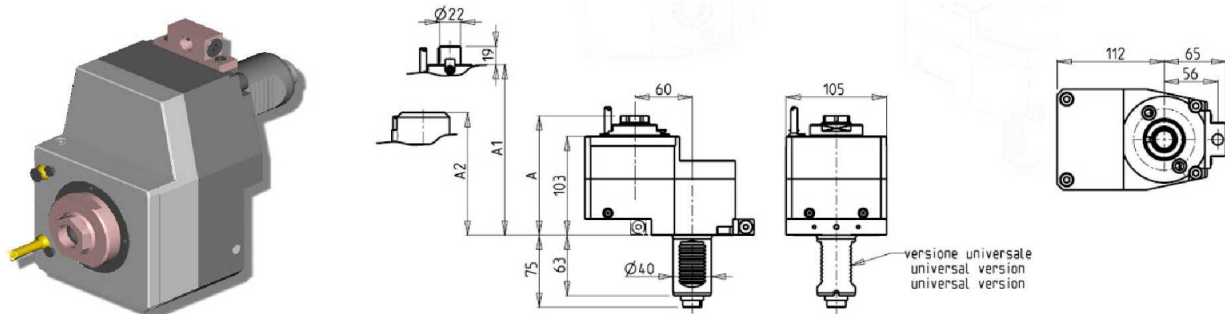
PartNumber	Description	Spindle	I	RPM	Coolant Thru	Ext Coolant	A1	A2	A3	D	L
SAU0240125	Axial ER25	ER25	1:1	4000		X	107.46				
SAU0241125	Axial ER25 Coolant Thru*	ER25	1:1	4000	X	X	107.46				
212SAU_A32_40D00	Axial ER32 VDI40 DIN5480	ER32	1:1	4000		X	110.46				
212SAU_A32_40D10	Axial ER32 VDI40 DIN5480 Coolant Thru*	ER32	1:1	4000	X	X	110.46				
SAU0240422	Mill Head D=22, L=19	22x19	1:1	4000		X		96.8		22	19
SAU0240320	Axial Weldon 20	Weldon 20	1:1	4000		X				106.3	
SAU0241320	Axial Weldon 20 Coolant Thru*	Weldon 20	1:1	4000	X	X				106.3	
SAU0240525	Axial Weldon 25	Weldon 25	1:1	4000		X				106.3	
SAU0241525	Axial Weldon 25 Coolant Thru*	Weldon 25	1:1	4000	X	X				106.3	

* Coolant Thru tools are designed for 1000 psi.
They require 5 Micron Filtration and **CANNOT** be run dry.

VDI40 DIN 5480

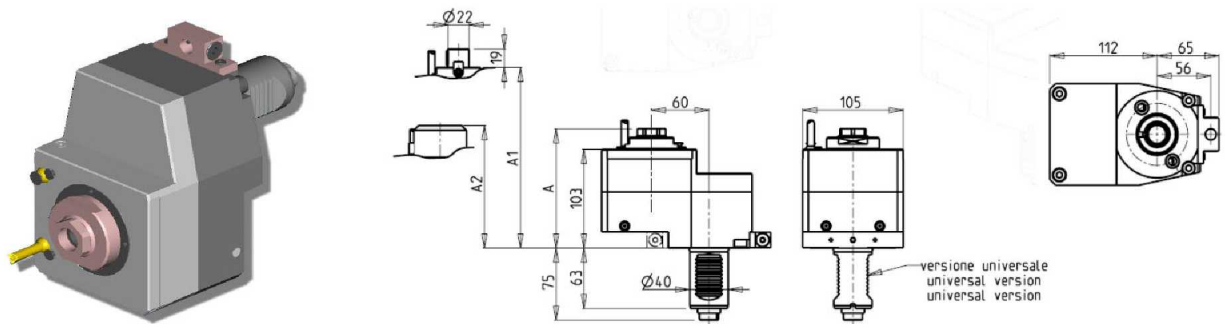
DRIVEN

AXIAL GEARED DOWN I=2:1 REDIRECTED DRIVEN TOOL VDI40 DIN 5480



PartNumber	Description	Orient.	Spindle	I	RPM	Ext Coolant	Reversible	A	A1	A2
SAU0120125	Axial Geared Down 2:1 Redirected ER25	Universal	ER25	2:1	3000	X	X	124.33		
SAU0120232	Axial Geared Down 2:1 Redirected ER32	Universal	ER32	2:1	3000	X	X	131.53		
SAU0120140	Axial Geared Down 2:1 Redirected ER40	Universal	ER40	2:1	2000	X	X	143.66		
SAU0120322	Axial Geared Down 2:1 Redirected Mill Head D22, L19	Universal	22x19	2:1	3000	X	X			116
SAU0120425	Axial Geared Down 2:1 Redirected Weldon 25	Universal	Weldon 25	2:1	3000	X	X			137

AXIAL GEARED DOWN I=3:1 REDIRECTED DRIVEN TOOL VDI40 DIN 5480

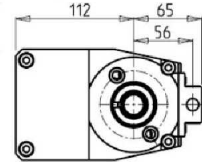
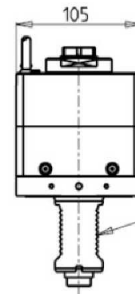
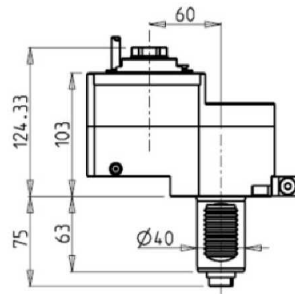
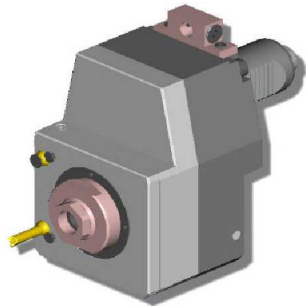


PartNumber	Description	Orient.	Spindle	I	RPM	Ext Coolant	Reversible	A	A1	A2
SAU0121125	Axial Geared Down 3:1 Redirected ER25	Universal	ER25	3:1	3000	X	X	124.33		
SAU0121232	Axial Geared Down 3:1 Redirected ER32	Universal	ER32	3:1	3000	X	X	131.53		
SAU0121140	Axial Geared Down 3:1 Redirected ER32	Universal	ER40	3:1	1300	X	X	143.66		
SAU0121322	Axial Geared Down 3:1 Redirected Mill Head D22, L19	Universal	22x19	3:1	3000	X	X			116
SAU0121425	Axial Geared Down 3:1 Redirected Weldon 25	Universal	Weldon 25	3:1	3000	X	X			137

VDI40 DIN 5480

DRIVEN

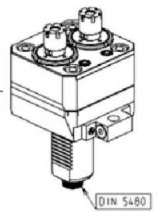
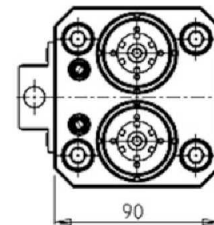
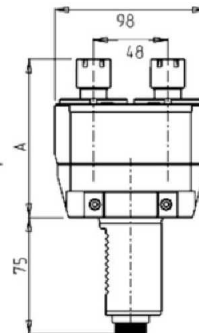
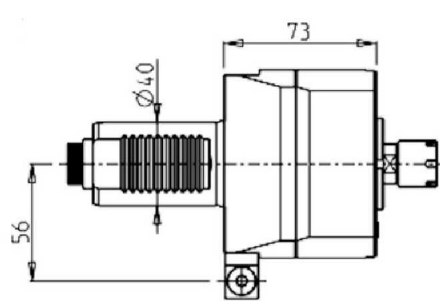
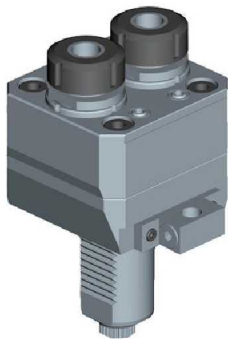
AXIAL GEARED UP 1=1:2 REDIRECTED DRIVEN TOOL VDI40 DIN 5480



versione universale
universal version
universal version

PartNumber	Description	Orient.	Spindle	I	RPM	Ext Coolant	Reversible
SAU0120525	Axial Geared Up 1:2 Redirected ER25A	Universal	ER25A	1:2	12000	X	X

RADIAL SINGLE SIDE TWIN HEAD DRIVEN TOOL IN Y VDI40 DIN5480

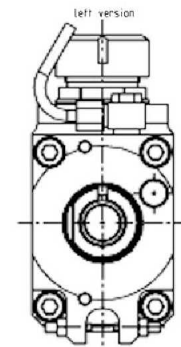
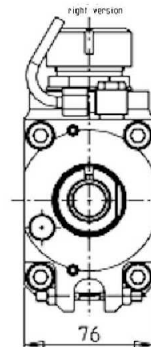
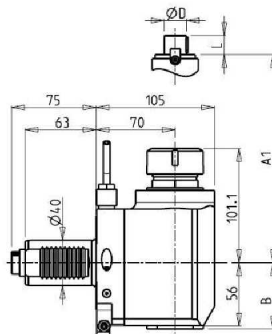
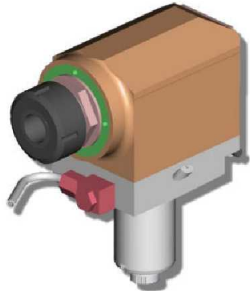


PartNumber	Description	Spindle	I	RPM	Ext. Coolant	A
SAU0450216	Radial RH Single Side Twin Head ER16	ER16	1:1	6000	X	102
SAU0450225	Radial RH Single Side Twin Head ER25	ER25	1:1	6000	X	102.96
SAU0451216	Radial LH Single Side Twin Head ER16	ER16	1:1	6000	X	102
SAU0451225	Radial LH Single Side Twin Head ER25	ER25	1:1	6000	X	102.96

VDI40 DIN 5480

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RADIAL DRIVEN TOOL VDI40 DIN 5480 H-70

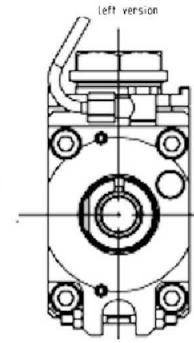
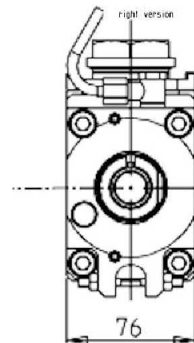
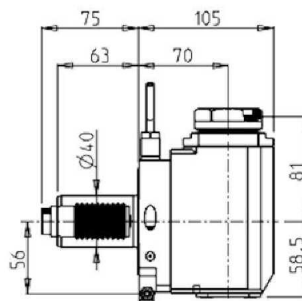


PartNumber	Description	Orient.	Spindle	I	RPM	Coolant Thru	Ext Coolant	A1	B
215SAU_R32_40D00	Radial RH H70 ER32	Right	ER32	1:1	6000		X		58.5
215SAU_R32_40D10	Radial RH H70 ER32 Coolant Thru*	Right	ER32	1:1	6000	X	X		82
215SAU_R22_40D00	Radial RH H70 Mill Head D=22, L=19	Right	22x19	1:1	6000		X	78.5	58.5
215SAU_R27_40D00	Radial RH H70 Mill Head D=27, L=21	Right	27x21	1:1	6000		X	78.5	58.5
215SAU_R32_40D20	Radial LH H70 ER32	Left	ER32	1:1	6000		X		58.5
215SAU_R32_40D30	Radial LH H70 ER32 Coolant Thru*	Left	ER32	1:1	6000	X	X		82
215SAU_R22_40D10	Radial LH H70 Mill Head D=22, L=19	Left	22x19	1:1	6000		X	78.5	58.5
215SAU_R27_40D10	Radial LH H70 Mill Head D=27, L=21	Left	27x21	1:1	6000		X	78.5	58.5

* Coolant Thru tools are designed for 1000 psi.
They require 5 Micron Filtration and **CANNOT** be run dry.

RADIAL MTSK DRIVEN TOOL VDI40 DIN 5480 H-70

See **ACCESSORIES** for MTSK Clamping Units

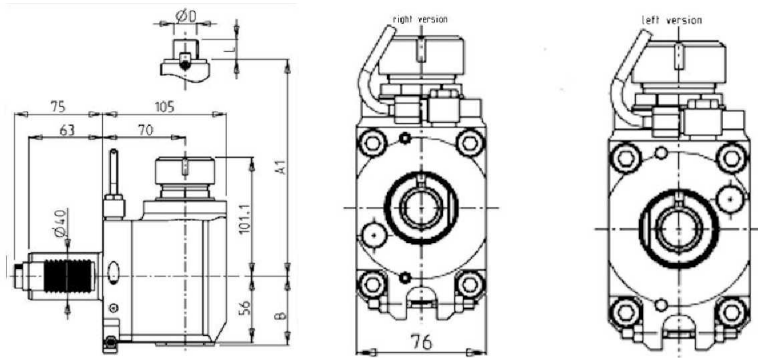
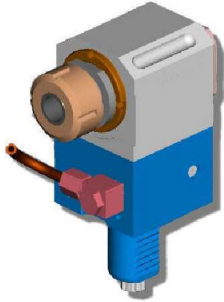


PartNumber	Description	Spindle	I	RPM	Ext Coolant
SAU0410140	Radial RH MTSK40 H=70	MTSK-40	1:1	6000	X
SAU0411140	Radial LH MTSK40 H=70	MTSK-40	1:1	6000	X

VDI40 DIN 5480

DRIVEN

RADIAL DRIVEN TOOL VDI40 DIN 5480 H-100

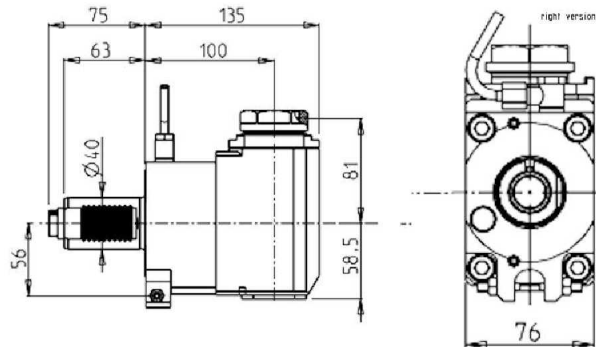


PartNumber	Description	Orient.	Spindle	I	RPM	Coolant Thru	Ext Coolant	A1	B
213SAU_R32_40D00	Radial RH H100 ER32	Right	ER32	1:1	4000		X		58.5
213SAU_R32_40D10	Radial RH H100 ER32 Coolant Thru*	Right	ER32	1:1	4000	X	X		82
213SAU_R22_40D00	Radial RH H100 Mill Head D=22, L=19	Right	22x19	1:1	4000		X	78.5	58.5
213SAU_R27_40D00	Radial RH H100 Mill Head D=27, L=21	Right	27x21	1:1	4000		X	78.5	58.5

* Coolant Thru tools are designed for 1000 psi.
They require 5 Micron Filtration and **CANNOT** be run dry.

RADIAL MTSK DRIVEN TOOL VDI40 DIN 5480 H-100

See **ACCESSORIES** for MTSK Clamping Units

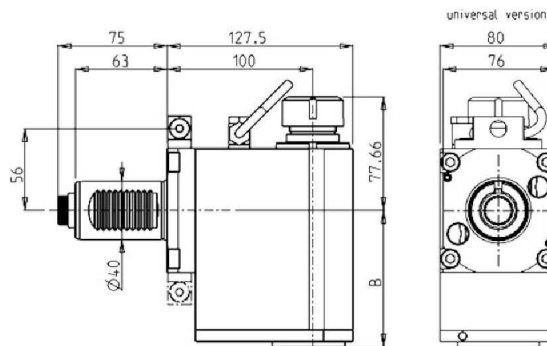
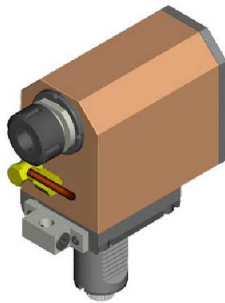


PartNumber	Description	Spindle	I	RPM	Ext. Coolant
SAU0420140	Radial RH MTSK40 H=100	MTSK-40	1:1	6000	X

VDI40 DIN 5480

DRIVEN

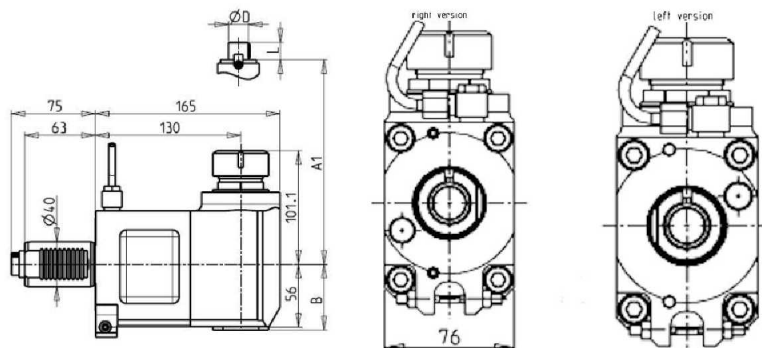
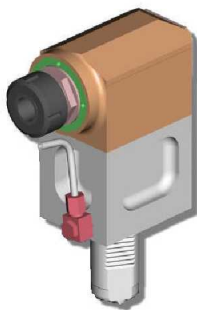
RADIAL GEARED UP 1:3 DRIVEN TOOL VDI40 DIN 5480



PartNumber	Description	Spindle	RPM	Coolant Thru	Ext. Coolant	B
SAU0310125	Radial Geared-Up 1:3 ER25	ER25	12000		X	93.5
SAU0310225	Radial Geared-Up 1:3 ER25 Coolant Thru*	ER25	12000	X	X	101.5

* Coolant Thru tools are designed for 1000 psi.
They require 5 Micron Filtration and **CANNOT** be run dry.

RADIAL DRIVEN TOOL VDI40 DIN 5480 H-130



PartNumber	Description	Orient.	Spindle	I	RPM	Coolant Thru	Ext Coolant	A1	B
213SAU_R32_40D20	Radial RH H130 ER32	Right	ER32	1:1	6000		X		58.5
213SAU_R32_40D40	Radial RH H130 ER32 Coolant Thru*	Right	ER32	1:1	6000	X	X		82
213SAU_R22_40D20	Radial RH H130 Mill Head D=22, L=19	Right	22x19	1:1	6000		X	78.5	58.5
213SAU_R27_40D20	Radial RH H130 Mill Head D=27, L=21	Right	27x21	1:1	6000		X	78.5	58.5
213SAU_R32_40D30	Radial LH H130 ER32	Left	ER32	1:1	6000		X		58.5
213SAU_R32_40D50	Radial LH H130 ER32 Coolant Thru*	Left	ER32	1:1	6000	X	X		82
213SAU_R22_40D30	Radial LH H130 Mill Head D=22, L=19	Left	22x19	1:1	6000		X	78.5	58.5
213SAU_R27_40D30	Radial LH H130 Mill Head D=27, L=21	Left	27x21	1:1	6000		X	78.5	58.5

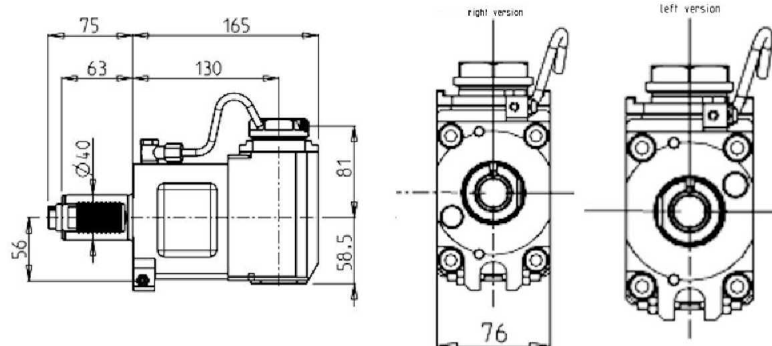
* Coolant Thru tools are designed for 1000 psi.
They require 5 Micron Filtration and **CANNOT** be run dry.

VDI40 DIN 5480

DRIVEN

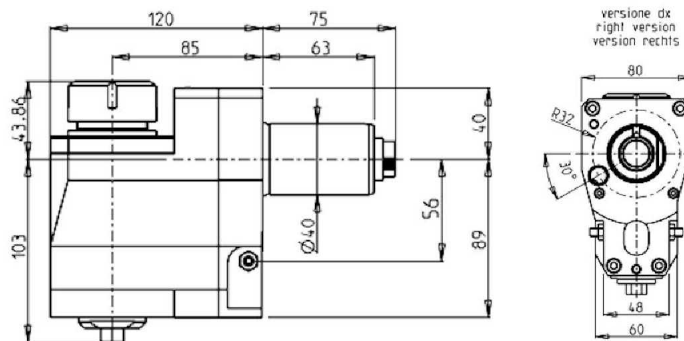
RADIAL MTSK DRIVEN TOOL VDI40 DIN 5480 H-130

See **ACCESSORIES** for MTSK Clamping Units



PartNumber	Description	Spindle	I	RPM	Ext. Coolant
SAU0430140	Radial RH MTSK40 H=130	MTSK-40	1:1	6000	X
SAU0431140	Radial LH MTSK40 H=130	MTSK-40	1:1	6000	X

RADIAL REAR SET DRIVEN TOOL VDI40 DIN 5480 H-85

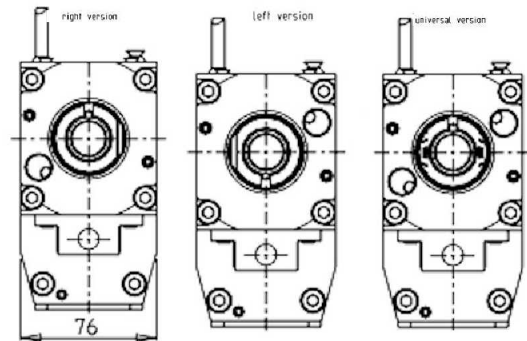
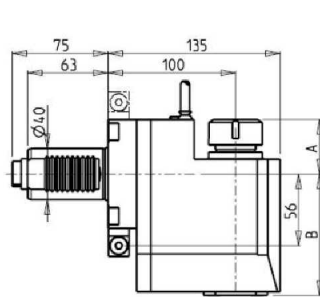


PartNumber	Description	Orient.	Spindle	I	RPM	Ext. Coolant
SAU0060132	RadialRear Set H85 ER32	Right	ER32	1:1	6000	X

VDI40 DIN 5480

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RADIAL REAR-SET DRIVEN TOOL VDI40 DIN 5480 H-100



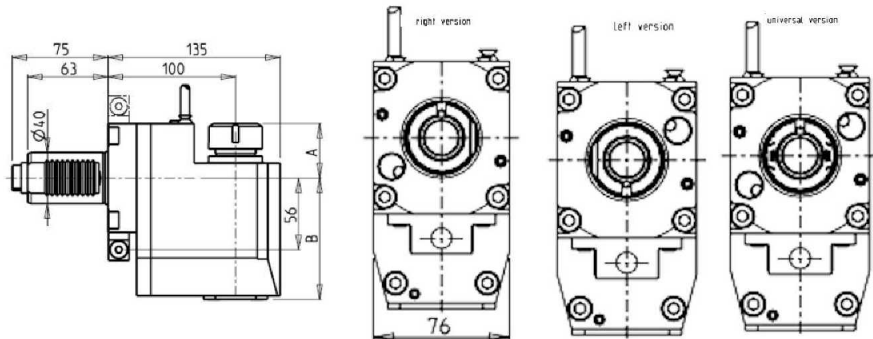
PartNumber	Description	Orient.	Spindle	I	RPM	Coolant Thru	Ext Coolant	A1	B
SAU0150125	Radial Rear-set ER25 RH H100	Right	ER25	1:1	6000		X	42.66	95
SAU0150225	Radial Rear-set ER25 RH H100 Coolant Thru*	Right	ER25	1:1	6000	X	X	42.66	108.5
SAU0150132	Radial Rear-set ER32 RH H100	Right	ER32	1:1	6000		X	45.66	95
SAU0150232	Radial Rear-set ER32 RH H100 Coolant Thru*	Right	ER32	1:1	6000	X	X	45.66	108.5
SAU0151125	Radial Rear-set ER25 LH H100	Left	ER25	1:1	6000		X	42.66	95
SAU0151225	Radial Rear-set ER25 LH H100 Coolant Thru*	Left	ER25	1:1	6000	X	X	42.66	108.5
SAU0151132	Radial Rear-set ER32 LH H100	Left	ER32	1:1	6000		X	45.66	95
SAU0151232	Radial Rear-set ER32 LH H100 Coolant Thru*	Left	ER32	1:1	6000	X	X	45.66	108.5
SAU0152125	Radial Rear-set ER25 Univ. H100	Universal	ER25	1:1	6000		X	42.66	95
SAU0152225	Radial Rear-set ER25 Univ. H100 Coolant Thru*	Universal	ER25	1:1	6000	X	X	42.66	108.5
SAU0152132	Radial Rear-set ER32 Univ. H100	Universal	ER32	1:1	6000		X	45.66	95
SAU0152232	Radial Rear-set ER32 Univ. H100 Coolant Thru*	Universal	ER32	1:1	6000	X	X	45.66	108.5

* Coolant Thru tools are designed for 1000 psi.
They require 5 Micron Filtration and **CANNOT** be run dry.

VDI40 DIN 5480

DRIVEN

RADIAL GEARED DOWN 2:1 REAR-SET DRIVEN TOOL VDI40 DIN 5480 H-100



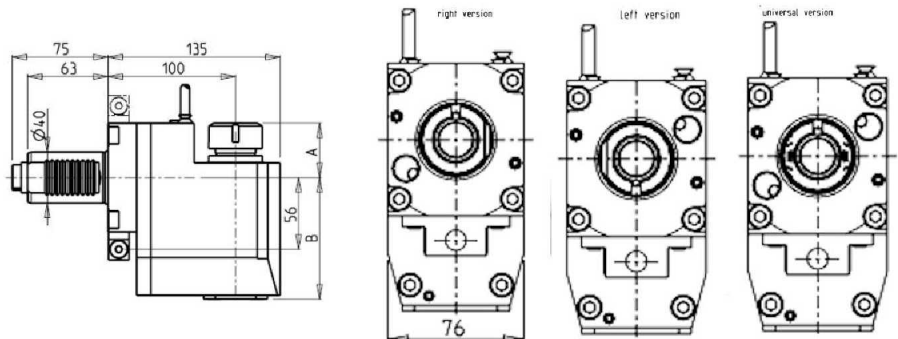
PartNumber	Description	Orient.	Spindle	I	RPM	Coolant Thru	Ext Coolant	A1	B
SAU0150325	Radial Rear-set Geared Down 2:1 ER25 RH H100	Right	ER25	2:1	3000		X	42.66	95
SAU0150425	Radial Rear-set Geared Down 2:1 ER25 RH H100 Coolant Thru*	Right	ER25	2:1	3000	X	X	42.66	108.5
SAU0150332	Radial Rear-set Geared Down 2:1 ER32 RH H100	Right	ER32	2:1	3000		X	45.66	95
SAU0150432	Radial Rear-set Geared Down 2:1 ER32 RH H100 Coolant Thru*	Right	ER32	2:1	3000	X	X	45.66	108.5
SAU0151325	Radial Rear-set Geared Down 2:1 ER25 LH H100	Left	ER25	2:1	3000		X	42.66	95
SAU0151425	Radial Rear-set Geared Down 2:1 ER25 LH H100 Coolant Thru*	Left	ER25	2:1	3000	X	X	42.66	108.5
SAU0151332	Radial Rear-set Geared Down 2:1 ER32 LH H100	Left	ER32	2:1	3000		X	45.66	95
SAU0151432	Radial Rear-set Geared Down 2:1 ER32 LH H100 Coolant Thru*	Left	ER32	2:1	3000	X	X	45.66	108.5
SAU0152325	Radial Rear-set Geared Down 2:1 ER25 Univ. H100	Universal	ER25	2:1	3000		X	42.66	95
SAU0152425	Radial Rear-set Geared Down 2:1 ER25 Univ. H100 Coolant Thru*	Universal	ER25	2:1	3000	X	X	42.66	108.5
SAU0152332	Radial Rear-set Geared Down 2:1 ER32 Univ. H100	Universal	ER32	2:1	3000		X	45.66	95
SAU0152432	Radial Rear-set Geared Down 2:1 ER32 Univ. H100 Coolant Thru*	Universal	ER32	2:1	3000	X	X	45.66	108.5

* Coolant Thru tools are designed for 1000 psi.
They require 5 Micron Filtration and **CANNOT** be run dry.

VDI40 DIN 5480

DRIVEN

RADIAL GEARED UP 1:2 REAR-SET DRIVEN TOOL VDI40 DIN 5480 H-100



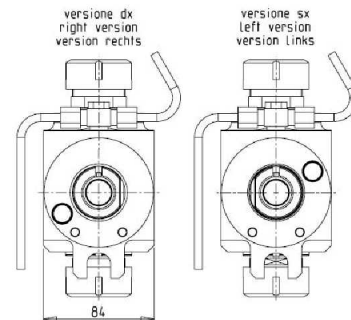
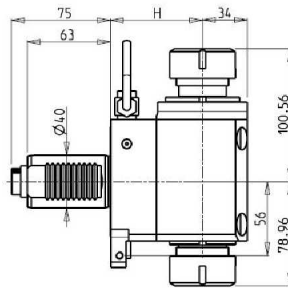
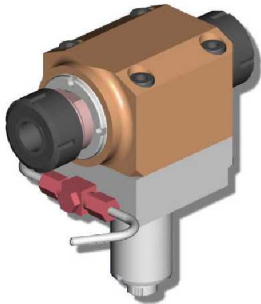
PartNumber	Description	Orient.	Spindle	I	RPM	Coolant Thru	Ext Coolant	A1	B
SAU0150525	Radial Rear-set Geared Up 1:2 ER25 RH H100	Right	ER25	1:2	12000		X	42.66	95
SAU0150625	Radial Rear-set Geared Up 1:2 ER25 RH H100 Coolant Thru*	Right	ER25	1:2	12000	X	X	42.66	108.5
SAU0150532	Radial Rear-set Geared Up 1:2 ER32 RH H100	Right	ER32	1:2	12000		X	45.66	95
SAU0150632	Radial Rear-set Geared Up 1:2 ER32 RH H100 Coolant Thru*	Right	ER32	1:2	12000	X	X	45.66	108.5
SAU0151525	Radial Rear-set Geared Up 1:2 ER25 LH H100	Left	ER25	1:2	12000		X	42.66	95
SAU0151625	Radial Rear-set Geared Up 1:2 ER25 LH H100 Coolant Thru*	Left	ER25	1:2	12000	X	X	42.66	108.5
SAU0151532	Radial Rear-set Geared Up 1:2 ER32 LH H100	Left	ER32	1:2	12000		X	45.66	95
SAU0151632	Radial Rear-set Geared Up 1:2 ER32 LH H100 Coolant Thru*	Left	ER32	1:2	12000	X	X	45.66	108.5
SAU0152525	Radial Rear-set Geared Up 1:2 ER25 Univ. H100	Universal	ER25	1:2	12000		X	42.66	95
SAU0152625	Radial Rear-set Geared Up 1:2 ER25 Univ. H100 Coolant Thru*	Universal	ER25	1:2	12000	X	X	42.66	108.5
SAU0152532	Radial Rear-set Geared Up 1:2 ER32 Univ. H100	Universal	ER32	1:2	12000		X	45.66	95
SAU0152632	Radial Rear-set Geared Up 1:2 ER32 Univ. H100 Coolant Thru*	Universal	ER32	1:2	12000	X	X	45.66	108.5

* Coolant Thru tools are designed for 1000 psi.
They require 5 Micron Filtration and **CANNOT** be run dry.

VDI40 DIN 5480

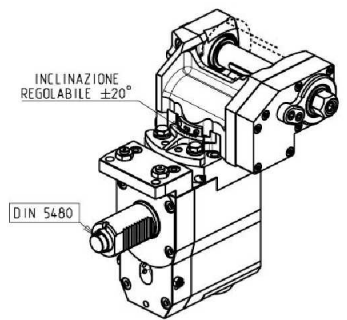
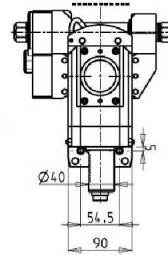
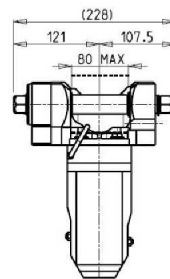
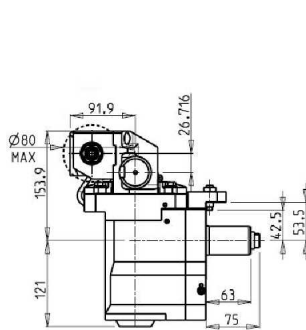
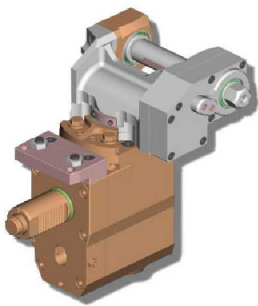
DRIVEN

OPPOSITE FACE RADIAL DRIVEN TOOL VDI40 DIN 5480



PartNumber	Description	Orient.	Spindle	I	RPM	Ext Coolant	H
216SAU_A32_40D00	Opposite Face ER32+ER32 RH H70	Right	ER32+ER32	1:1	6000	X	70
216SAU_A32_40D10	Opposite Face ER32+ER32 LH H70	Left	ER32+ER32	1:1	6000	X	70
SAU0030232	Opposite Face ER32+ER32 RH H100	Right	ER32+ER32	1:1	6000	X	100

GEAR HOBBER OFF-SET VDI40 DIN 5480



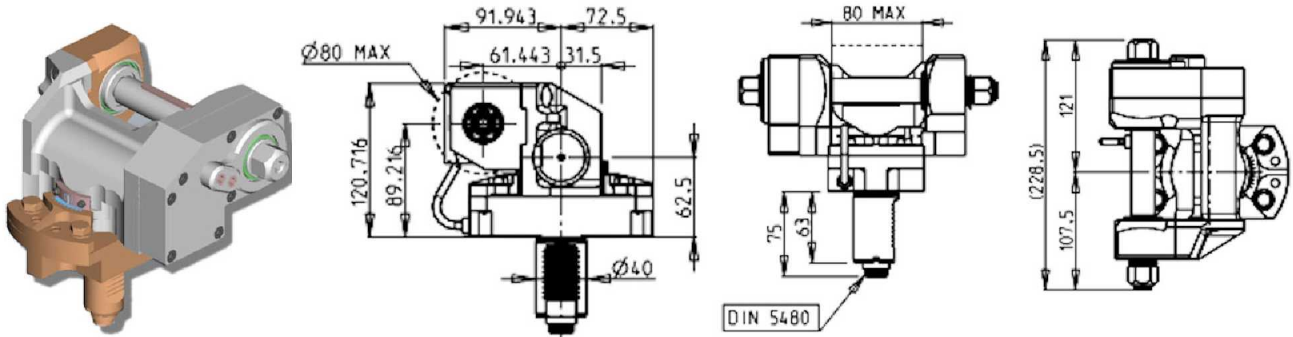
PartNumber	Description	Orient.	I	RPM	Ext Coolant	D mm	D Inch
SAU0011140	Gear Hobber Off-Set 1:1	Right	1:1	4000	X	16-22-27-32	3/4"-1" - 1 1/4"
SAU0012140	Gear Hobber Off-Set 2:1	Right	2:1	2000	X	16-22-27-32	3/4"-1" - 1 1/4"

Note : Wrenches are provided with the purchase of Specialty Toolholders

VDI40 DIN 5480

DRIVEN

GEAR HOBBER VDI40 DIN 5480



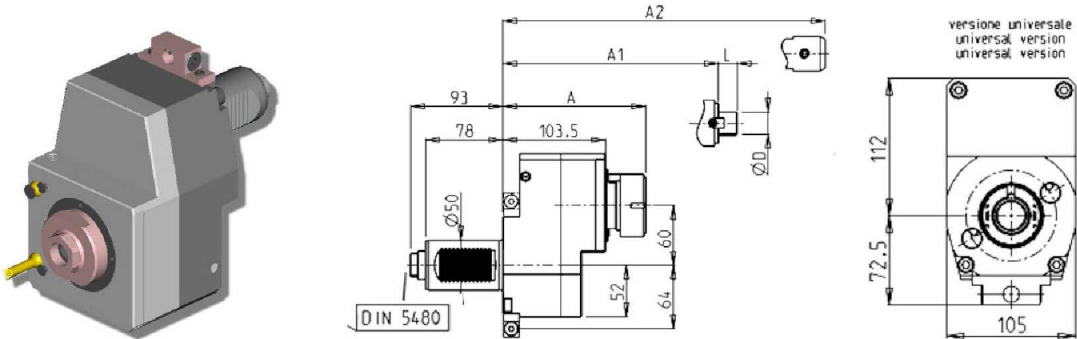
PartNumber	Description	I	RPM	Ext. Coolant	D (mm)	D (Inch)
SAU0051100	Gear Hobber RH	1:1	6000	X	16-22-27-32	3/4"-1"-1 1/4"
SAU0051110	Gear Hobber LH	1:1	6000	X	16-22-27-32	3/4"-1"-1 1/4"
SAU0052100	Gear Hobber RH 2:1	1:1	3000	X	16-22-27-32	3/4"-1"-1 1/4"
SAU0052110	Gear Hobber LH 2:1	1:1	3000	X	16-22-27-32	3/4"-1"-1 1/4"

Note : Wrenches are provided with the purchase of Specialty Toolholders

VDI50 DIN 5482

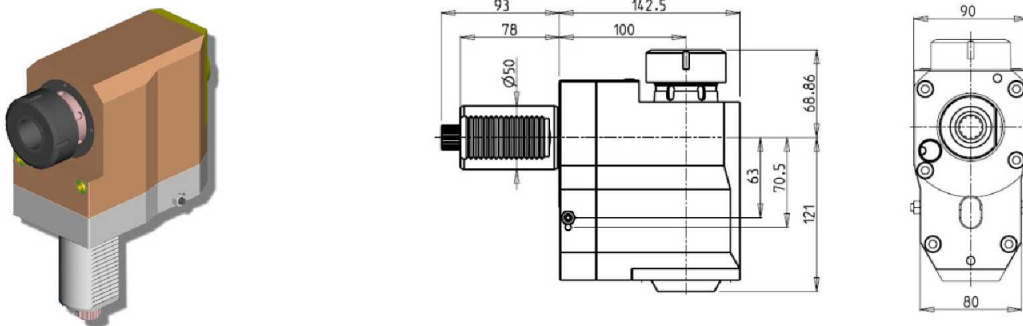
DRIVEN

AXIAL REDIRECTED DRIVEN TOOL VDI50 DIN 5482



PartNumber	Description	Orient.	Spindle	I	RPM	Ext Coolant
245SAU_A40_50D00	Axial Redirected ER40	Right	ER40	1:1	4000	X

RADIAL REAR-SET DRIVEN TOOL VDI50 DIN 5482 H-100

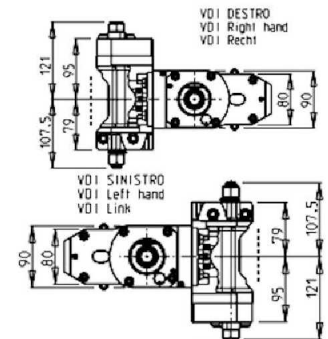
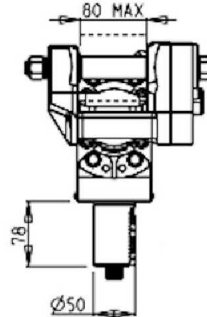
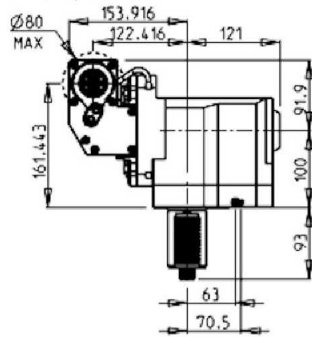
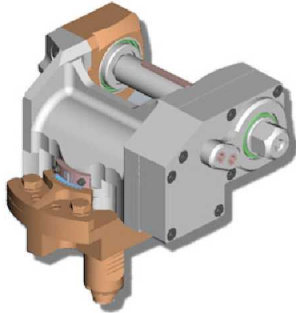


PartNumber	Description	Orient.	Spindle	I	RPM	Ext Coolant
241SAU_R40_50D00	Radial Rear-set ER40 H100 RH	Right	ER40	1:1	4000	X
241SAU_R40_50D20	Radial Rear-set ER40 H100 LH	Left	ER40	1:1	4000	X

VDI50 DIN 5482

DRIVEN

GEAR HOBBER VDI50 DIN 5482



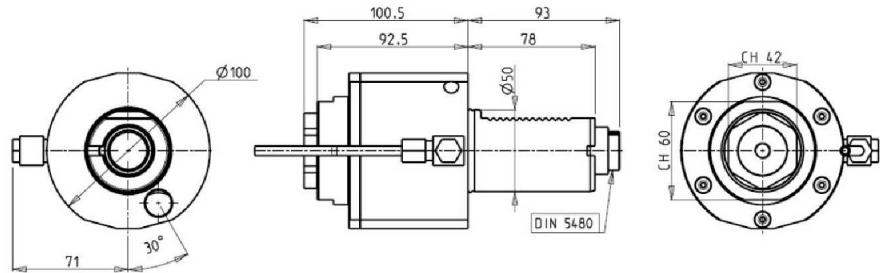
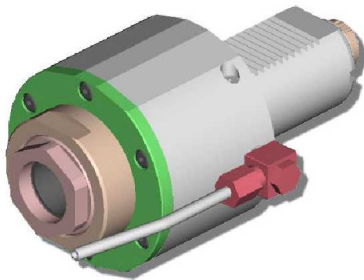
PartNumber	Description	I	RPM	Ext. Coolant	D (mm)	D (Inch)
SAU0371100	Gear Hobber RH VDI50 DIN5482	1:1	4000	X	16-22-27-32	3/4"-1"-1 1/4"
SAU0371110	Gear Hobber LH VDI50 DIN5482	1:1	4000	X	16-22-27-32	3/4"-1"-1 1/4"
SAU0372100	Gear Hobber RH 2:1 VDI50 DIN5482	1:1	2000	X	16-22-27-32	3/4"-1"-1 1/4"
SAU0372110	Gear Hobber LH 2:1 VDI50 DIN5482	1:1	2000	X	16-22-27-32	3/4"-1"-1 1/4"

Note : Wrenches are provided with the purchase of Specialty Toolholders

VDI50 DIN 5480

DRIVEN

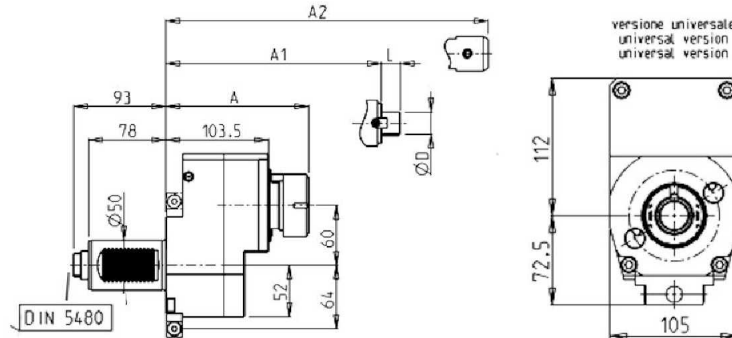
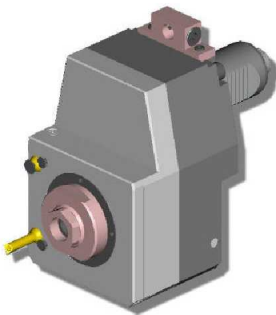
AXIAL DRIVEN TOOL VDI50 DIN 5480



PartNumber	Description	Spindle	I	RPM	Coolant Thru	Ext Coolant
SAU0040140	Axial ER40A VDI50 DIN5480	ER40A	1:1	4000		X
SAU0040240	Axial ER40A VDI50 DIN5480 Coolant Thru*	ER40A	1:1	4000	X	X

* Coolant Thru tools are designed for 1000 psi.
They require 5 Micron Filtration and **CANNOT** be run dry.

AXIAL REDIRECTED DRIVEN TOOL VDI50 DIN 5480

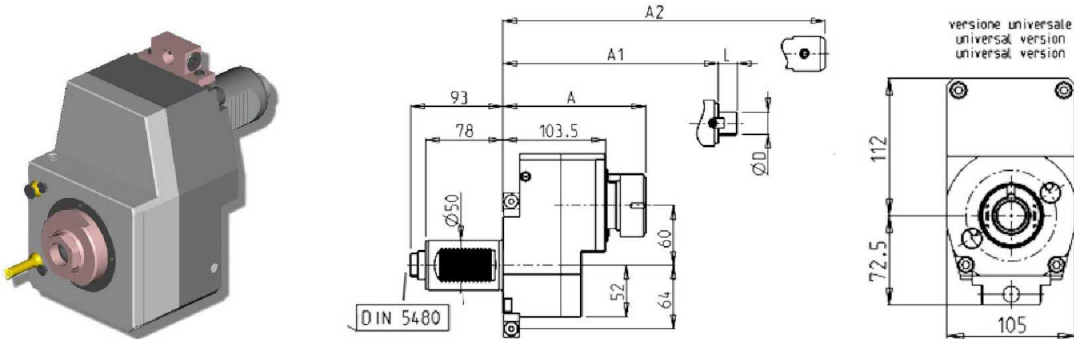


PartNumber	Description	Spindle	Reversible	I	RPM	Ext Coolant	A	A1	A2	D	L
SAU0281125	Axial Redirected ER25	ER25	X	1:1	3500	X	144.16				
SAU0281132	Axial Redirected ER32	ER32	X	1:1	3500	X	115.8				
SAU0280140	Axial Redirected ER40	ER40	X	1:1	3500	X	122.5				
SAU0282122	Axial Redirected 22x19 Mill Head	22x19	X	1:1	3500	X		116.5		22	19
SAU0283125	Axial Redirected Weldon 25	Weldon 25	X	1:1	3500	X			137.5		

VDI50 DIN 5480

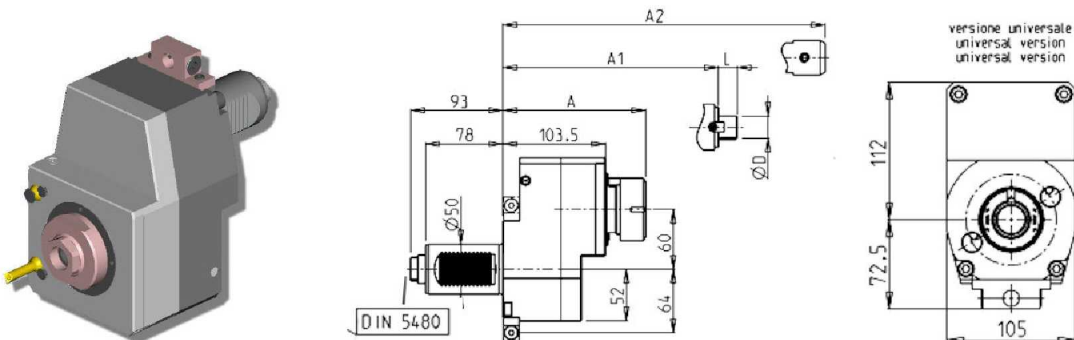
DRIVEN

AXIAL GEARED DOWN 2:1 REDIRECTED DRIVEN TOOL VDI50 DIN 5480



PartNumber	Description	Spindle	Reversible	I	RPM	Ext. Coolant	A	A1	A2	D	L
SAU0281225	Axial Geared-Down 2:1 Re-Redirected ERA25	ERA25	X	2:1	1750	X	144.16				
SAU0281232	Axial Geared-Down 2:1 Re-Redirected ER32	ER32	X	2:1	1750	X	115.8				
SAU0280240	Axial Geared-Down 2:1 Re-Redirected ER40	ER40	X	2:1	1750	X	122.5				
SAU0282222	Axial Geared-Down Re-Redirected Mill Head 22x19	22x19	X	2:1	1750	X		116.5		22	19
SAU0283225	Axial Geared-Down 2:1 Re-Redirected Weldon 25	Weldon 25	X	2:1	1750	X			137.5		

AXIAL GEARED UP 1:2 REDIRECTED DRIVEN TOOL VDI50 DIN 5480

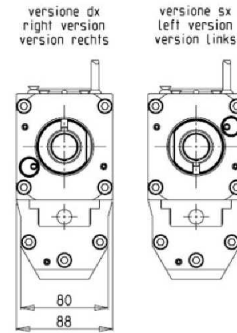
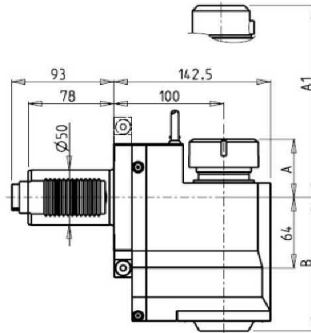


PartNumber	Description	Spindle	Reversible	I	RPM	Ext. Coolant	A	A1	A2	D	L
SAU0281325	Axial Geared Up 1:2 ER25	ER25	X	1:2	7000	X	144.16				
SAU0281332	Axial Geared Up Re-Redirected 1:2 ER32	ER32	X	1:2	7000	X	115.8				
SAU0280340	Axial Geared Up Re-Redirected 1:2 ER40	ER40	X	1:2	7000	X	122.5				
SAU0282322	Axial Geared Up Re-Redirected 1:2 Mill Head 22x19	22x19	X	1:2	7000	X		116.5		22	19
SAU0283325	Axial Geared Up Re-Redirected 1:2 Weldon 25	Weldon 25	X	1:2	7000	X			137.5		

VDI50 DIN 5480

DRIVEN

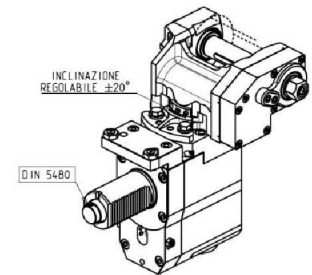
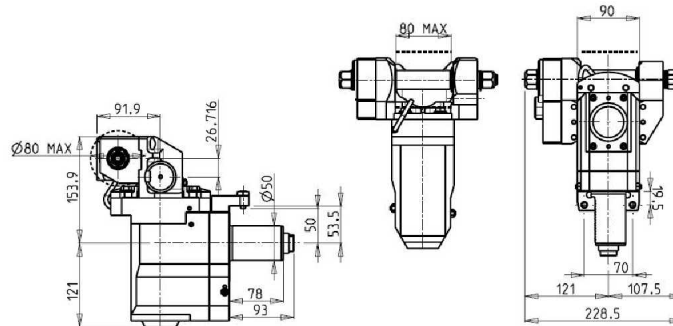
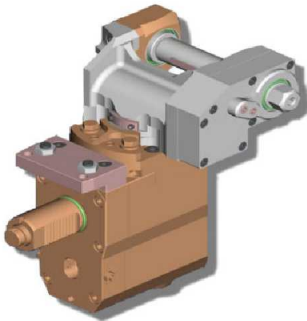
RADIAL REAR-SET DRIVEN TOOL VDI50 DIN 5480 H-100



PartNumber	Description	Orient.	Spindle	I	RPM	Ext Cool	Cool Thru	A	A1	B
SAU0270140	Radial Rear-set ER40 RH H100	Right	ER40	1:1	3500	X		52.66		121
SAU0270240	Radial Rear-set ER40 RH H100 Coolant Thru*	Right	ER40	1:1	3500	X	X	52.66		135
SAU0270325	Radial Rear-set Weldon 25 RH H100	Right	Weldon 25	1:1	3500	X			42.5	121
SAU0271140	Radial Rear-set ER40 LH H100	Left	ER40	1:1	3500	X		52.66		121
SAU0271240	Radial Rear-set ER40 LH H100 Coolant Thru*	Left	ER40	1:1	3500	X	X	52.66		135
SAU0271325	Radial Rear-set Weldon 25 LH H100	Left	Weldon 25	1:1	3500	X			42.5	121

* Coolant Thru tools are designed for 1000 psi. They require 5 Micron Filtration and **CANNOT** be run dry.

GEAR HOBBER VDI50 DIN 5480



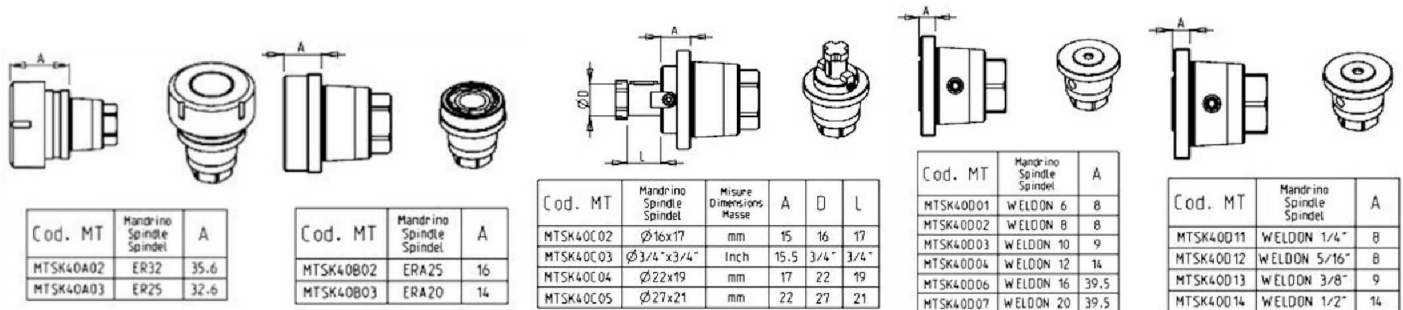
PartNumber	Description	Orient.	I	RPM	Ext Coolant	D mm	D Inch
SAU0011150	Gear Hobber 1:1	Right	1:1	4000	X	16-22-27-32	3/4"-1"- 1 1/4"
SAU0012150	Gear Hobber 2:1	Right	2:1	2000	X	16-22-27-32	3/4"-1"- 1 1/4"

Note : Wrenches are provided with the purchase of Specialty Toolholders

ACCESSORIES

DRIVEN

MTSK-40 QUICK CHANGE TOOLHOLDER CLAMP CHART



PartNumber	Description	Spindle	Dimensions	A	D	L
MTSK40A02	MTSK-40 ER32	ER32		35.6		
MTSK40A03	MTSK-40 ER25	ER25		32.6		
MTSK40B02	MTSK-40 ERA25	ERA25		16		
MTSK40B03	MTSK-40 ERA20	ERA20		14		
MTSK40C03	MTSK-40 3/4"x3/4"	3/4"x3/4"	Inch	15.5	3/4"	3/4"
MTSK40C02	MTSK-40 16x17	16x17	mm	15	16	17
MTSK40C04	MTSK-40 22x19	22x19	mm	17	22	19
MTSK40C05	MTSK-40 27x21	27x21	mm	22	27	21
MTSK40D01	MTSK-40 Weldon 6	Weldon 6		8		
MTSK40D02	MTSK-40 Weldon 8	Weldon 8		8		
MTSK40D03	MTSK-40 Weldon 10	Weldon 10		9		
MTSK40D04	MTSK-40 Weldon 12	Weldon 12		14		
MTSK40D06	MTSK-40 Weldon 16	Weldon 12		39.5		
MTSK40D07	MTSK-40 Weldon 20	Weldon 20		39.5		
MTSK40D11	MTSK-40 Weldon 1/4"	Weldon 1/4"		8		
MTSK40D12	MTSK-40 Weldon 5/16"	Weldon 5/16"		8		
MTSK40D13	MTSK-40 Weldon 3/8"	Weldon 3/8"		9		
MTSK40D14	MTSK-40 Weldon 1/2"	Weldon 1/2"		14		

ER COLLETS : SETS AND INDIVIDUAL ".0002" ACCURACY

INCH SIZES	ER16		ER20		ER25		ER32		ER40	
	Standard	Coolant	Standard	Coolant	Standard	Coolant	Standard	Coolant	Standard	Coolant
3/64	ER16-001		ER20-001		ER25-001		ER32-001		ER40-001	
1/16	ER16-002		ER20-002		ER25-002		ER32-002		ER40-002	
5/64	ER16-003		ER20-003		ER25-003		ER32-003		ER40-003	
3/32	ER16-004		ER20-004		ER25-004		ER32-004		ER40-004	
7/64	ER16-005		ER20-005		ER25-005		ER32-005		ER40-005	
1/8	ER16-006	ERX16-001	ER20-006	ER20X-001	ER25-006	ER25X-001	ER32-006	ER32X-001	ER40-006	
9/64	ER16-007	ERX16-002	ER20-007		ER25-007		ER32-007		ER40-007	
5/32	ER16-008	ERX16-003	ER20-008	ER20X-002	ER25-008	ER25X-002	ER32-008	ER32X-002	ER40-008	ERX40-001
11/64	ER16-009	ERX16-004	ER20-009		ER25-009		ER32-009		ER40-009	
3/16	ER16-010	ERX16-005	ER20-010	ER20X-003	ER25-010	ER25X-003	ER32-010	ER32X-003	ER40-010	ERX40-002
13/64	ER16-011	ERX16-006	ER20-011		ER25-011		ER32-011		ER40-011	
7/32	ER16-012	ERX16-007	ER20-012	ER20X-004	ER25-012	ER25X-004	ER32-012	ER32X-004	ER40-012	ERX40-003
15/64	ER16-013	ERX16-008	ER20-013		ER25-013		ER32-013		ER40-013	
1/4	ER16-014	ERX16-009	ER20-014	ER20X-005	ER25-014	ER25X-005	ER32-014	ER32X-005	ER40-014	ERX40-004
17/64	ER16-015	ERX16-010	ER20-015		ER25-015		ER32-015		ER40-015	
9/32	ER16-016	ERX16-011	ER20-016	ER20X-006	ER25-016	ER25X-006	ER32-016	ER32X-006	ER40-016	ERX40-005
19/64	ER16-017	ERX16-012	ER20-017		ER25-017		ER32-017		ER40-017	
5/16	ER16-018	ERX16-013	ER20-018	ER20X-007	ER25-018	ER25X-007	ER32-018	ER32X-007	ER40-018	ERX40-006
21/64	ER16-019	ERX16-014	ER20-019		ER25-019		ER32-019		ER40-019	
11/32	ER16-020	ERX16-015	ER20-020	ER20-008	ER25-020	ER25X-008	ER32-020	ER32X-008	ER40-020	ERX40-007
23/64	ER16-021	ERX16-016	ER20-021		ER25-021		ER32-021		ER40-021	
3/8	ER16-022	ERX16-017	ER20-022	ER20-009	ER25-022	ER25X-009	ER32-022	ER32X-009	ER40-022	ERX40-008
25/64	ER16-023	ERX16-018	ER20-023		ER25-023		ER32-023		ER40-023	
13/32			ER20-024	ER20X-010	ER25-024	ER25X-010	ER32-024	ER32X-010	ER40-024	ERX40-009
27/64			ER20-025		ER25-025		ER32-025		ER40-025	
7/16			ER20-026	ER20X-011	ER25-026	ER25X-011	ER32-026	ER32X-011	ER40-026	ERX40-010
29/64			ER20-027		ER25-027		ER32-027		ER40-027	
15/32			ER20-028	ER20X-012	ER25-028	ER25X-012	ER32-028	ER32X-012	ER40-028	ERX40-011
31/64			ER20-029		ER25-029		ER32-029		ER40-029	
1/2			ER20-030	ER20X-013	ER25-030	ER25X-013	ER32-030	ER32X-013	ER40-030	ERX40-012
33/64					ER25-031		ER32-031		ER40-031	

INCH SIZES	ER16 Standard	ER16 Coolant	ER20 Standard	ER20 Coolant	ER25 Standard	ER25 Coolant	ER32 Standard	ER32 Coolant	ER40 Standard	ER40 Coolant
17/32					ER25-032	ER25X-014	ER32-032	ER32X-014	ER40-032	ERX40-013
35/64					ER25-033		ER32-033		ER40-033	
9/16					ER25-034	ER25X-015	ER32-034	ER32X-015	ER40-034	ERX40-014
37/64					ER25-035		ER32-035		ER40-035	
19/32					ER25-036	ER25X-016	ER32-036	ER32X-016	ER40-036	ERX40-015
39/64					ER25-037		ER32-037		ER40-037	
5/8					ER25-038	ER25X-017	ER32-038	ER32X-017	ER40-038	ERX40-016
41/64							ER32-039		ER40-039	
21/32							ER32-040	ER32X-018	ER40-040	ERX40-017
43/64							ER32-041		ER40-041	
11/16							ER32-042	ER32X-019	ER40-042	ERX40-018
45/64							ER32-043		ER40-043	
23/32							ER32-044	ER32X-020	ER40-044	ERX40-019
47/64							ER32-045		ER40-045	
3/4							ER32-046	ER32X-021	ER40-046	ERX40-020
49/64							ER32-047		ER40-047	
25/32							ER32-048	ER32X-022	ER40-048	ERX40-021
51/64							ER32-049		ER40-049	
13/16							ER32-050		ER40-050	ERX40-022
53/64									ER40-051	
27/32									ER40-052	ERX40-023
55/64									ER40-053	
7/8									ER40-054	ERX40-024
57/64									ER40-055	
29/32									ER40-056	ERX40-025
59/64									ER40-057	
15/16									ER40-058	ERX40-026
61/64									ER40-059	
31/32									ER40-060	ERX40-027
63/64									ER40-061	
1"									ER40-062	ERX40-028
1-1/64									ER40-063	
SET	ER16-SET	ERX16-SET	ER20-SET	ERX20-SET	ER25-SET	ERX25-SET	ER32-SET	ERX32-SET	ER40-SET	ERX40-SET

ER COLLETS

ER COLLET NUMBER	DESCRIPTION	MD LIST PRICE
ER16-001 thru ER16-023	ER16 Collet	\$ 15.00
ER16-SET	ER16 Collet Set (11 Collets)	\$ 150.00
ERX16-001 thru ERX16-018	ER16 Sealed Collet	\$ 25.00
ERX16-SET	ER16 Sealed Collet Set (9 Collets)	\$ 220.00
ER20-001 thru ER20-030	ER20 Collet	\$ 15.00
ER20-SET	ER20 Collet Set (15 Collets)	\$ 220.00
ERX20-001 thru ERX20-013	ER20 Sealed Collet	\$ 25.00
ERX20-SET	ER20 Sealed Collet Set (13 Collets)	\$ 315.00
ER25-001 thru ER25-038	ER25 Collet	\$ 15.00
ER25-SET	ER25 Collet Set (19 Collets)	\$ 275.00
ERX25-001 thru ERX25-017	ER25 Sealed Collet	\$ 26.00
ERX25-SET	ER25 Sealed Collet Set (17 Collets)	\$ 430.00
ER32-001 thru ER32-050	ER32 Collet	\$ 15.00
ER32-SET	ER32 Collet Set (21 Collets)	\$ 315.00
ERX32-001 thru ERX32-022	ER32 Sealed Collet	\$ 28.00
ERX32-SET	ER32 Sealed Collet Set (21 Collets)	\$ 588.00
ER40-001 thru ER40-063	ER40 Collet	\$ 20.00
ER40-SET	ER40 Collet Set (29 Collets)	\$ 575.00
ERX40-001 thru ERX40-028	ER40 Sealed Collet	\$ 30.00
ERX40-SET	ER40 Sealed Collet Set (27 Collets)	\$ 800.00

LIVE TOOL WRENCHES

ER COLLET NUMBER	DESCRIPTION	MD LIST PRICE
From Catalog Above	ER Collet Wrench (Identify Holder)	\$ 22.00
From Catalog Above	Spindle Locking Wrench (Identify Holder)	\$ 22.00

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Alphabetized Listing

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SAU0280340	Axial Geared Up Re-Directed 1:2 ER40	34			
SAU0281125	Axial Redirected ER25	33			
SAU0281132	Axial Redirected ER32	33			
SAU0281225	Axial Geared-Down 2:1 Re-Directed ERA25	34			
SAU0281232	Axial Geared-Down 2:1 Re-Directed ER32	34			
SAU0281325	Axial Geared Up 1:2 ER25	34			
SAU0281332	Axial Geared Up Re-Directed 1:2 ER32	34			
SAU0282122	Axial Redirected 22x19 Mill Head	33			
SAU0282222	Axial Geared-Down Re-Directed Mill Head 22x19	34			
SAU0282322	Axial Geared Up Re-Directed 1:2 Mill Head 22x19	34			
SAU0283125	Axial Redirected Weldon 25	33			
SAU0283225	Axial Geared-Down 2:1 Re-Directed Weldon 25	34			
SAU0283325	Axial Geared Up Re-Directed 1:2 Weldon 25	34			
SAU0310125	Radial Geared-Up 1:3 ER25	24			
SAU0310225	Radial Geared-Up 1:3 ER25 Coolant Thru*	24			
SAU0331100	Gear Hobber	18			
SAU0332100	Gear Hobber 2:1	18			
SAU0340120	Radial Geared-Up RH1:2 ERA20	9			
SAU0340220	Radial Geared-Up RH1:2 ERA20 Coolant Thru*	9			
SAU0341120	Radial Geared-Up LH1:2 ERA20	9			