



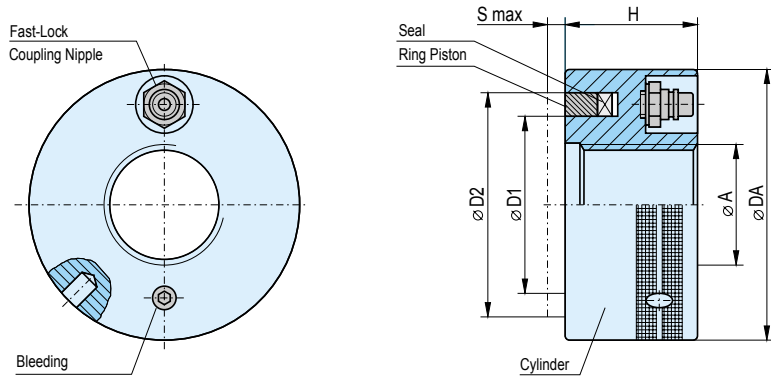
SCHAAF®

Hydraulic Nut

with Fast-Lock Coupling Nipple SVN 1047 on end face
10 mm stroke

PG 9

A 5400



Article No.	Thread up to Ø A mm	Ring Piston Area mm ²	Force at 700 bar kN	OD Ø DA mm	Height H mm	Ring Piston		Stroke S _{max.} mm
						Ø D1 mm	Ø D2 mm	
A 5400.05	36	3.534	247	116	85	60	90	10
A 5400.07	55	5.360	375	140	85	80	115	10
A 5400.09	85	5.890	412	165	85	110	140	10
A 5400.10	105	6.833	478	185	85	130	160	10
A 5400.11	125	7.775	544	205	85	150	180	10
A 5400.12	145	8.718	610	230	85	170	200	10
A 5400.13	165	9.660	676	250	85	190	220	10
A 5400.14	185	12.782	895	280	85	215	250	10
A 5400.15	210	12.868	901	305	85	240	272	10
A 5400.17	250	13.902	973	345	85	280	310	10
A 5400.19	280	20.735	1451	385	90	310	350	10
A 5400.20	310	22.619	1583	415	90	340	380	10
A 5400.21	330	23.876	1671	435	90	360	400	10
A 5400.22	370	26.389	1847	475	90	400	440	10
A 5400.23	410	28.903	2023	515	100	440	480	10
A 5400.24	430	30.159	2111	535	100	460	500	10
A 5400...	1000	Any other design possible due to our own design department.						

The distinguishing feature of Hydraulic Nut **A 5400** is the Fast-Lock Coupling Nipple SVN 1047 which allows to connect efficient hand or motor pumps, quickly and securely.

When released the hydraulic oil flows back into the tank of the pump. Easy operation, when using the SCHAAF Pressure Relief Coupler DEV. Operated from the end face.

Ready to use in no time!

Stroke of 10 mm and very high clamping force.

For Nipple on the OD: see type A 5300.

How to select:

- The thread size must be covered by the type in consideration, e.g. TR 280 x 4 RH requires at least A 5400.19.
- The Ring Piston must match the counterface. If, in the example of TR 280 x 4 RH, the counterface has an ID of 355 mm, the bigger type of Nut is required, i.e. A 5400.21.
- Please check all relevant dimensions. If they do not fit, ask SCHAAF's consulting service.

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Visit us on the internet and convince yourself of our innovative services and products.

SCHAAF has been developing and manufacturing high-pressure hydraulic tools since 1954.

Example for ordering: SCHAAF-article No. A 5400.21 with thread TR 280 x 4, Right Hand.

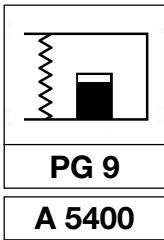
Please let us know your requirements; we will be pleased to submit a quick quotation without obligation for you.





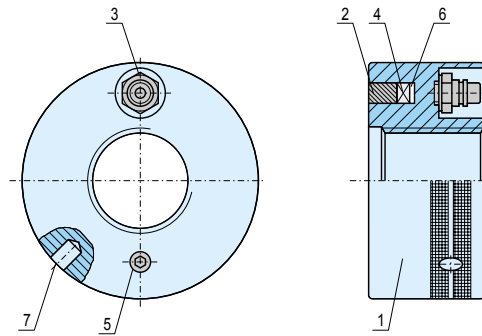
SCHAAF®

Hydraulic High-Pressure Tools



PG 9

A 5400



Functional Characteristics

A SCHAAF Hydraulic Nut of this design has a circular groove which is sealed to the exterior by an axially sliding ring piston and, thus, forms an annular hydraulic chamber. When pressurized, the ring piston is pushed out, contacts the counterface and generates an axial pressure force. Since the ring piston is self-aligning it can, within certain limits, adapt to errors in run-out and to an uneven counterface. This characteristic offers a great advantage, in a lot of applications.

In the case of the Hydraulic Nuts, type **A 5400**, the pressure is generated by an external hand or motor pump which gets connected by the Fast-Lock Coupling Nipple SVN 1047 (3).

Advantages:

- torsion free, purely axial generation of the clamping force
- very high clamping forces from extra wide ring piston
- long service life without connecting to a pressure source
- due to leakproof seal systems pressure safe = autarkic system
- to use as a machine part i.e. on rotating arbours
- resulting clamping force is independent of the stroke
- no friction in the thread since the Hydraulic Nut is not turned under load (no thread wear)
- quick and easy operation, even large Hydraulic Nuts with appropriate hand or motor pump
- SCHAAF-Hydraulic Nuts can be serviced by the customer on site (overhaul by our service department on request)

Examples for Application:

- Fixing rotary cutters on slitters or edge trimmers
- Fixing the grinding wheel on the grinding arbour
- Fixing straightening rolls on roll straightening machines
- Fixing the forming rolls on roll forming lines
- Locating roll neck bearings in rolling mills
- Clamping edging rolls

Note:

- Designed stroke is 10 mm max. (bigger stroke on request)
- Clamping force is precisely monitored by the pressure gauge of the pump or control unit resp.
- Axial Fast-Lock Coupling Nipple SVN 1047 with type A 5300.

SCHAAF - Quality means:

- Components manufactured from high tensile materials (wear resisting)
- Constant monitoring to improve quality for all products
- Each Hydraulic Nut and other hydraulic accessories are tested to the operating pressure or higher
- All products are delivered ready for operation
- Detailed technical documentation are part of the delivery (operating manual, drawing and parts list)

Standard Features

Standard SCHAAF Hydraulic Nuts, Type A 5400, consist of:

- Cylinder, knurled up to size 17 (1)
- Ring Piston (retained in the cylinder to prevent loss) (2)
- Fast-Lock Coupling Nipple SVN 1047, radial (3)
- High Pressure Seal Set for temperatures from -30°C through to +100°C (4)
- Bleeding Screw (5)
- Pressure medium (hydraulic oil) (6)

and are equipped with:

- radial tommy bar holes (7)
- thread recess for centering
- surface treatment (chemi-blackened)
- tommy bar

Variations in equipment:

- **Material**
 - stainless and acidproof steel
 - aluminium alloys
 - various combinations of material
 - seals for elevated temperatures
- **Pressure control by**
 - indicator pin
 - pressure gauge
 - other methods
- **Locking of the hydraulically generated pre-tensioning force**
 - shims
- **Surface finish**
 - lacquered
 - chemi-nickel coating
 - on customer's request
- **Certificates and Approvals**
 - force characteristic curve
 - work's test certificate
 - approval to customer's specifications

Accessories (optional)

- **Assembly Tools**
 - guiding shaft
 - guiding sleeve
 - sling gear
 - auxiliaries to customer's requirements
- **Service Set for Maintenance by the Customer**

SCHAAF has been developing and manufacturing high-pressure hydraulic tools since 1954.