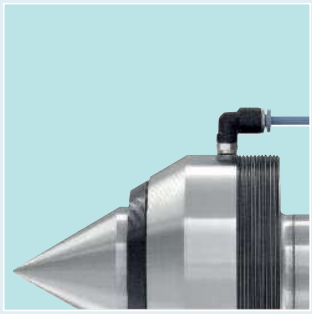
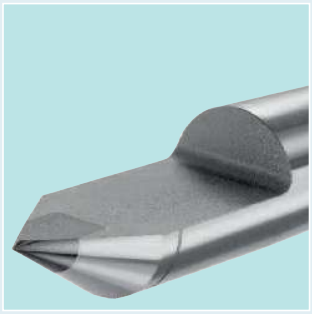
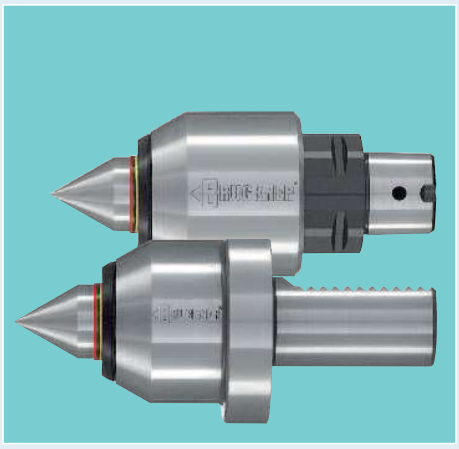
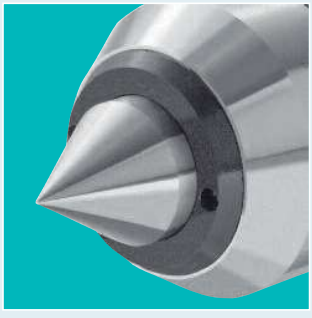
BRUCKNER®
Precision and reliability first

High Performance Centres

for Turning and Grinding

Technical features:

- Spring loaded centres with pressure indication by yellow, green, red rings.
- Designed for high radial and axial loads and for higher speeds.
- High precision bearings in the head of the housing and within the taper. The bearing seats of housing and centre spindle are matched to the bearings and ground to precise tolerances.
- High running accuracy tested under axial load and guaranteed with test report.
- Housings and centre spindles are hardened.
- Rotary seals protect bearings from dirt and coolant.
- Maintenance-free permanent lubrification.

Applications:

- Multi-spindle machines
- CNC lathes without tailstock
- CNC lathes with opposed spindle

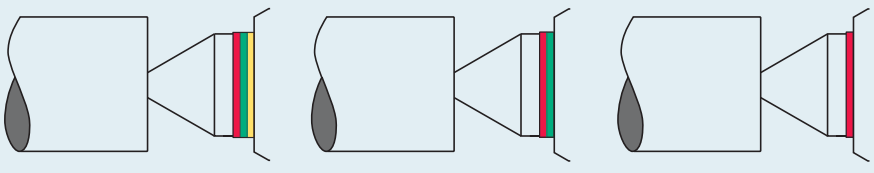
Design principle on page 29, type LR

Range of axial force per coloured ring

Housing ∅ DG	axial force daN		
55	0-250	250-500	500-850
68	0-350	350-620	620-850

Reduction of spring force through soft spring on request

Example of function for T Line



low clamping force | medium clamping force | high clamping force

VDI shanks

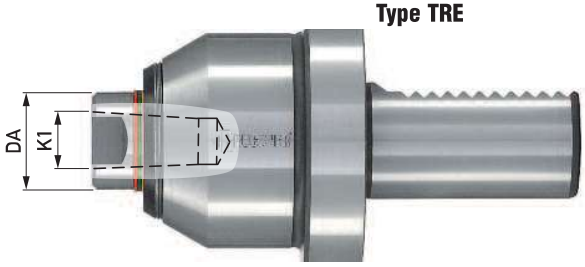
Type TRS – centrepoint 60°
Type TRV – centrepoint 60°/40° extended
Type TRE – centre spindle with 1:7.5 internal taper for centering inserts (page 37)

Runout
Max .0.005 mm with test report
Max. 0.003 mm high precision design on request

Type TRS

Type TRV

Type TRE



Centering inserts for type TRE on page 37

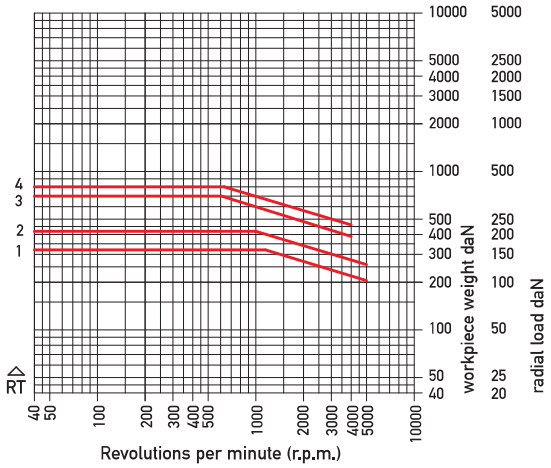
Type	TRS	TRV	TRE	TRS	TRV	TRE
ID.No.	700S 055VDI30	700V 055VDI30	700E 055VDI30	700S 068VDI40	700V 068VDI40	700E 068VDI40
Shank size VDI	30	30	30	40	40	40
DG	55	55	55	68	68	68
DA	-	25	25	-	35	35
D	25	12	-	35	14	-
DF	68	68	68	83	83	83
K1	-	-	15	-	-	22
LA	28	37	13	40	49	21
LB	56	56	56	68	68	68
LC	84	93	68,5	108	117	90
Workpiece weight max. daN*	420	320	*	800	700	*
Spring travel	2.7	2.7	2.7	4.2	4.2	4.2
r.p.m. max.*	5000	5000	5000	4000	4000	4000
radial/axial load graph	RT2/AT1	RT1/AT1	*	RT4/AT2	RT3/AT2	*
Insert size	-	-	484..	-	-	487..

*The radial load of type TRE is limited by the centering inserts (page 37)

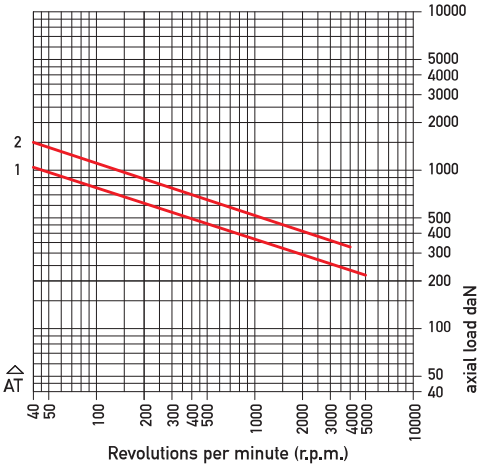
*observe the load graphs

Radial and axial loads for a bearing life of 2.000 operating hours (see calculation example page 13)

Radial – Types TRS/TRV VDI



Axial – Types TRS/TRV VDI

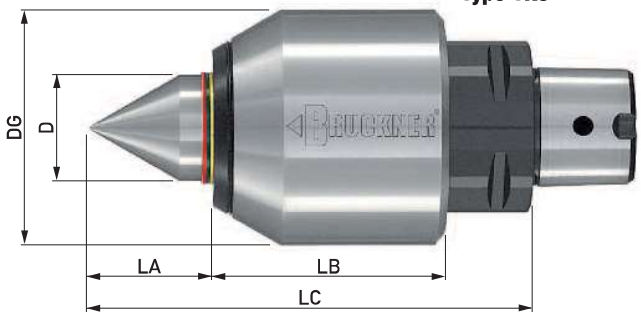


Capto shank

Type TRS – centrepoint 60°
Type TRV – centrepoint 60°/40° extended
Type TRE – centre spindle with 1:7.5 internal taper for centering inserts (page 37)

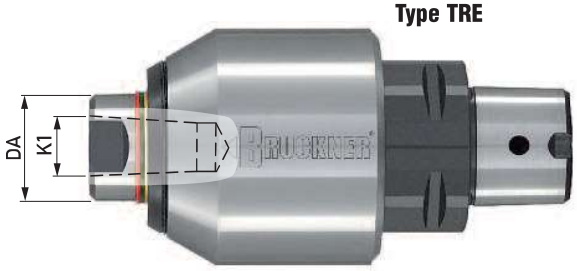
Runout
Max. 0.005 mm with test report
Max. 0.003 mm high precision design on request

Type TRS



Type TRV

Type TRE



Centering inserts for type TRE on page 37

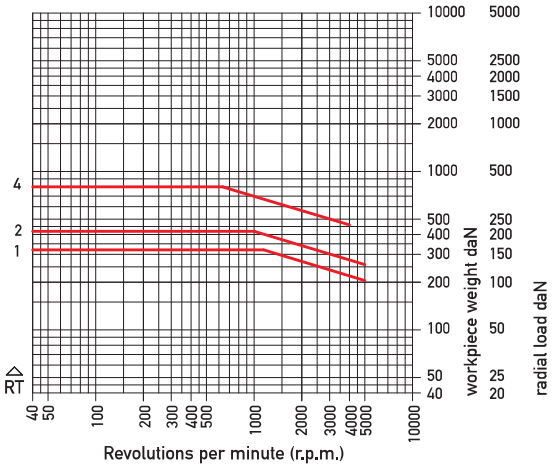
Type	TRS	TRV	TRE	TRS	TRE	TRS	TRE
ID.No.	700S 055C04	700V 055C04	700E 055C04	700S 068C05	700E 068C05	700S 068C06	700E 068C06
Shaft size Capto	C4	C4	C4	C5	C5	C6	C6
DG	55	55	55	68	68	68	68
DA	-	25	25	-	35	-	35
D	25	12	-	35	-	35	-
K1	-	-	15	-	22	-	22
LA	28	37	13	40	21	40	21
LB	54	54	54	74	74	76	76
LC	103	112	87	134	116	138	120
Workpiece weight max. daN*	420	320	*	800	*	800	*
Spring travel	2.7	2.7	2.7	4.2	4.2	4.2	4.2
r.p.m. max.*	5000	5000	5000	4000	4000	4000	4000
radial/axial load graph	RT2/AT1	RT1/AT1	*	RT4/AT2	*	RT4/AT2	*
Insert size	-	-	484..	-	487..	-	487..

*The radial load of type TRE is limited by the centering inserts (page 37)

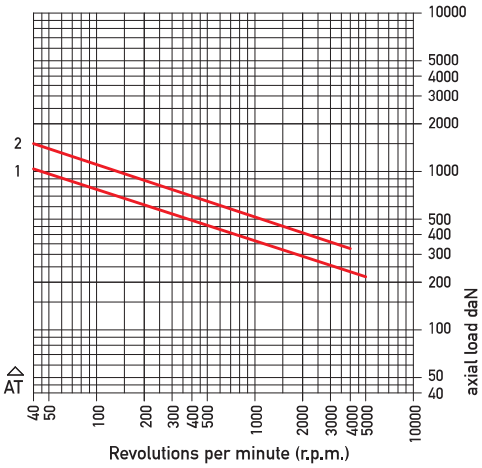
*observe the load graphs

Radial and axial loads for a bearing life of 2.000 operating hours (see calculation example page 13)

Radial – Types TRS/TRV Capto



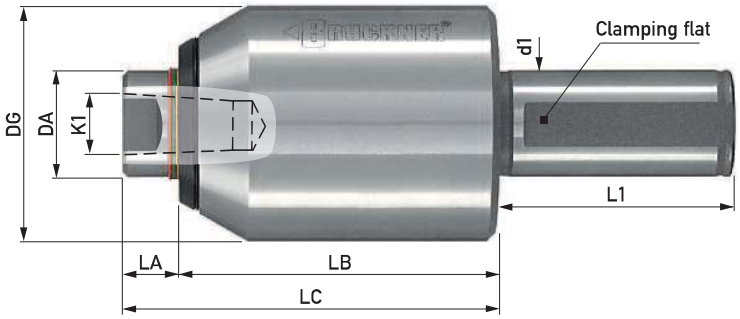
Axial – Types TRS/TRV Capto



Cylindrical shank

Type TRE – centre spindle with internal taper 1:7.5 for centering inserts (page 37)
centrepoint 60° on request

Runout
Max. 0.005 mm with test report
Max. 0.003 mm high precision design on request.



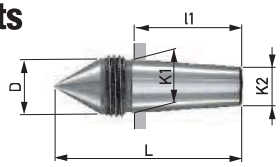
Centering inserts for type TRE on page 37

Type TRE ID.No.	700E 055Zyl25.4	700E 055Zyl25	700E 055Zyl32	700E 068Zyl32	700E 068Zyl40
Shaft size d1	25,4 (1“)	25	32	32	40
DG	55	55	55	68	68
DA	25	25	25	35	35
K1	15	15	15	22	22
LA	13	13	13	21	21
LB	74	74	74	89	89
LC	87	87	87	110	110
L1	55	55	65	65	80
Spring travel	2.7	2.7	2.7	4.2	4.2
r.p.m. max.	5000	5000	5000	4000	4000
Corresponding insert	**484..**	**484..**	**484..**	**487..**	**487..**
Load	The radial load of type TRE is limited by the centering inserts (page 37)				

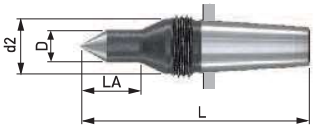
Interchangeable inserts

taper 1:7.5, in gauge accuracy

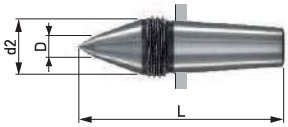
Form AO, 60°
draw-off thread



Form ASL, 60°
slim, extended
draw-off thread

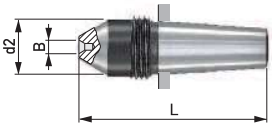


Form AKOP, 60°/40°
extended
draw-off thread

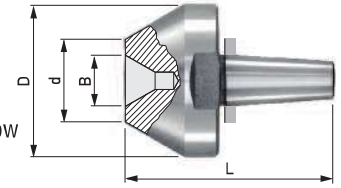


Form A, 60°
for hollow parts
spanner flat

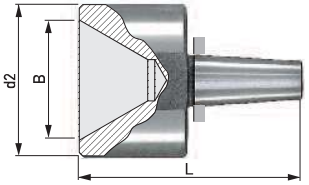
Form B, centre 60°
for centreless workpieces,
draw-off thread



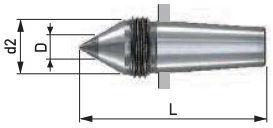
Form C, centre 60°
for centreless workpieces,
external angle 60° for hollow
parts, spanner flat



Form D, centre 60°
for centreless workpieces,
spanner flat



Form AOHM, 60°
with carbide insert
draw-off thread



Basic Centre Types: LDE, TRE	Inserts	Radial load max. daN	Insert dimensions						Thread SW	Taper dimensions taper 1:7.5		
ID.No.	ID.No.		D	d2	B	d	L	LA		K1	K2	l1
710E 045002	482AO	90	11.7				45		M 14x1.5	11	8	23
	482ASL	30	6	11.7			55	15	M 14x1.5			
	482AKOP	90	5	11.7			50		M 14x1.5			
	482A	90	17				45		SW14			
	482B	90	11.7		4x2		45		M 14x1.5			
	482C	90	28		8x3	12	45		SW24			
	482D	90	28		20x6		45		SW24			
	482AOHM	60	7	11.7			45		M 14x1.5			
710E 055003 700E 055VDI30 700E 055CO4 700E 055Zyl25,4 700E 055Zyl25 700E 055Zyl32	484AO	160	15.7				53		M 18x1.5	15	11	30
	484ASL	100	9	15.7			65	17	M 18x1.5			
	484AKOP	160	6	15.7			58		M 18x1.5			
	484A	160	25				60		SW22			
	484B	110	15.7		4x2		53		M 18x1.5			
	484C	160	44		15x5	24	60		SW41			
	484D	160	44		35x12		64		SW41			
	484AOHM	60	7	15.7			53		M 18x1.5			
710E 068004 700E 068VDI40 700E 068CO5 700E 068CO6 700E 068Zyl32 700E 068Zyl40	487AO	300	21.6				74		M 24x1.5	22	16.4	42
	487ASL	100	9	21.6			86	17	M 24x1.5			
	487AKOP	300	8	21.6			80		M 24x1.5			
	487A	300	32				82		SW27			
	487B	240	21.6		5x2,5		74		M 24x1.5			
	487C	300	55		20x6	30	82		SW50			
	487D	300	55		45x15		85		SW50			
	487AOHM	200	11	21.6			74		M 24x1.5			
710E 092005	485AO	500	27.7				93		M 30x1.5	28	21	52.5
	485ASL	180	13	27.7			110	27	M 30x1.5			
	485AKOP	500	8	27.7			105		M 30x1.5			
	485A	500	45				105		SW41			
	485B	500	27.7		7x3		93		M 30x1.5			
	485C	500	65		25x6	35	105		SW55			
	485D	500	65		55x20		105		SW55			
	485AOHM	500	18	27.7			93		M 30x1.5			

ID.No.	content
P 10	100 g

Installation paste
Makes insert change easier.
Apply thinly and evenly to the insert taper.

BRUCKNER®
Precision and reliability first

Karl Bruckner GmbH
Precision Tool Manufactures

P.O. Box 3146
D-71373 Weinstadt

Bruckwiesenstraße 13
D-71384 Weinstadt-Großheppach

Phone +49 (0) 7151 9671-0
Fax +49 (0) 7151 9671-23

info@karlbruckner.de
www.karlbruckner.de

> ...also in our programm

HS Face Drivers
with hydraulic compensation

SM Face Drivers
with mechanical compensation

Work Drivers