



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 concentricity 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 due to permanent lubrication.

Applications:

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

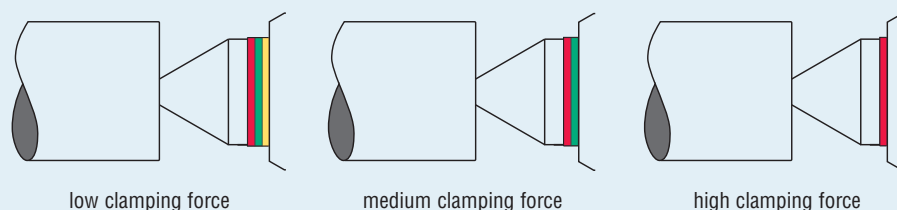
Design principle on page 29, type LR

Range of axial force per coloured ring

Housing \varnothing 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

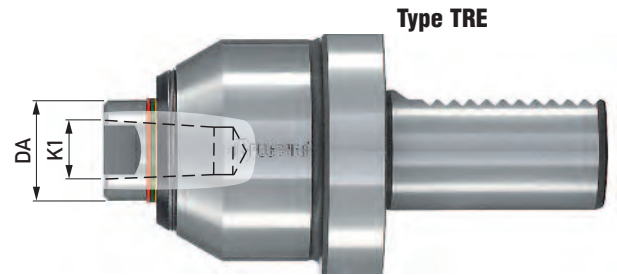
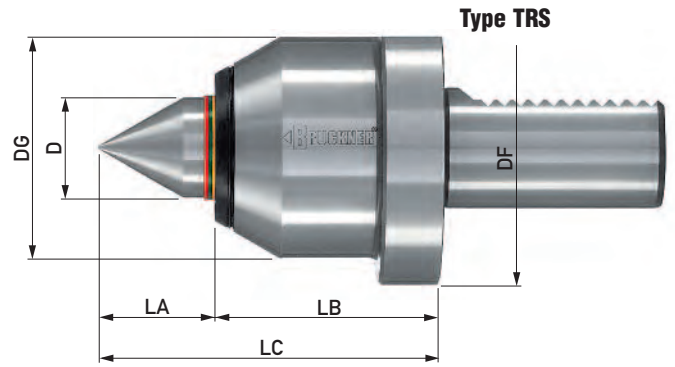


VDI shank

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

Runout

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



Interchangeable inserts for type TRE on page 37

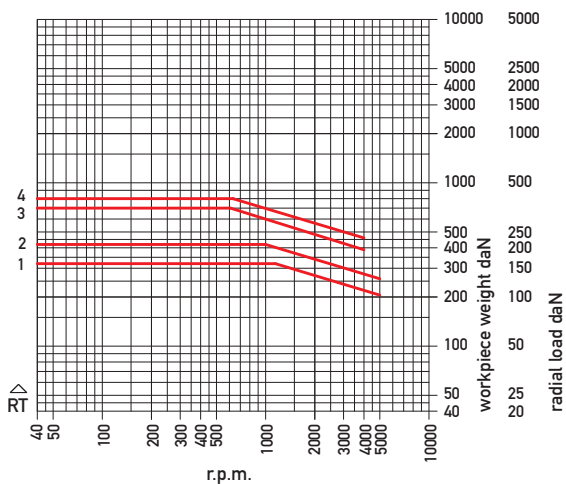
Type	TRS	TRV	TRE	TRS	TRV	TRE
ID.No.	700S 055VDI30	700V 055VDI30	700E 055VDI30	700S 068VDI40	700V 068VDI40	700E 068VDI40
Shaft size VDI	30	30	30	40	40	40
DG	55	55	55	68	68	68
DA	-	25	25	-	35	35
D	25	12	-	35	14	-
DF	68	68	68	83	83	83
K1	-	-	15	-	-	22
LA	28	37	13	40	49	21
LB	56	56	56	68	68	68
LC	84	93	68,5	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	*
Suitable inserts	-	-	484..	-	-	487..

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

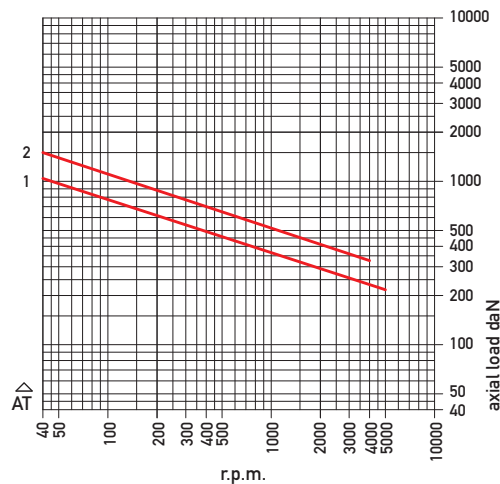
*observe the load graphs

Radial and axial loads for a bearing life of 2000 operating hours (see calculation example page 11)

Radial – Types TRS/TRV VDI



Axial – Types TRS/TRV VDI

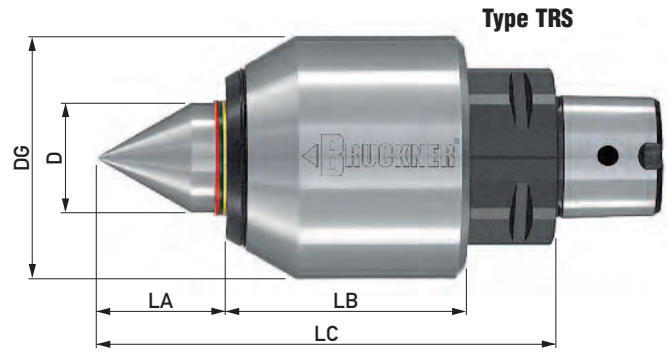


Capto shank

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

Runout

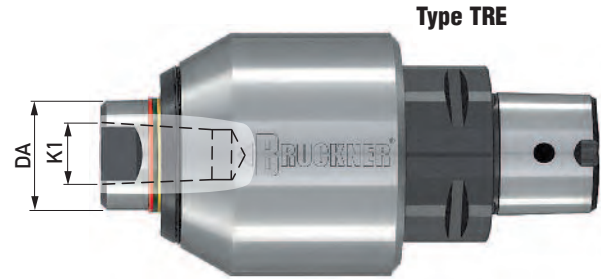
max. 0.005 mm with test report
 max. 0.003 mm high precision design on request



Type TRS



Type TRV



Type TRE

Interchangeable inserts for type TRE on page 37

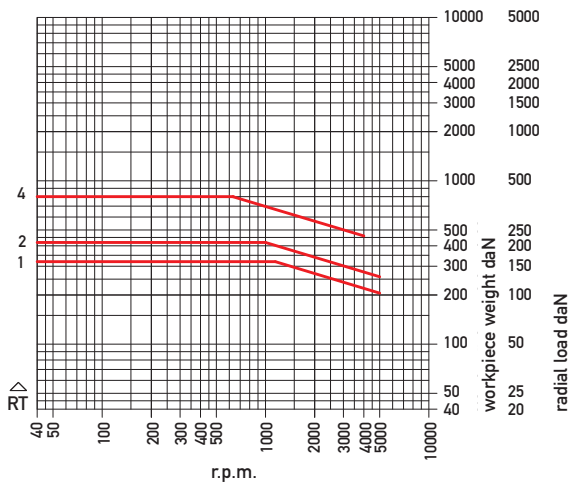
Type	TRS	TRV	TRE	TRS	TRE	TRS	TRE
ID.No.	700S 055C04	700V 055C04	700E 055C04	700S 068C05	700E 068C05	700S 068C06	700E 068C06
Shaft size Capto	C4	C4	C4	C5	C5	C6	C6
DG	55	55	55	68	68	68	68
DA	-	25	25	-	35	-	35
D	25	12	-	35	-	35	-
K1	-	-	15	-	22	-	22
LA	28	37	13	40	21	40	21
LB	54	54	54	74	74	76	76
LC	103	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	*
Suitable inserts	-	-	484..	-	487..	-	487..

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

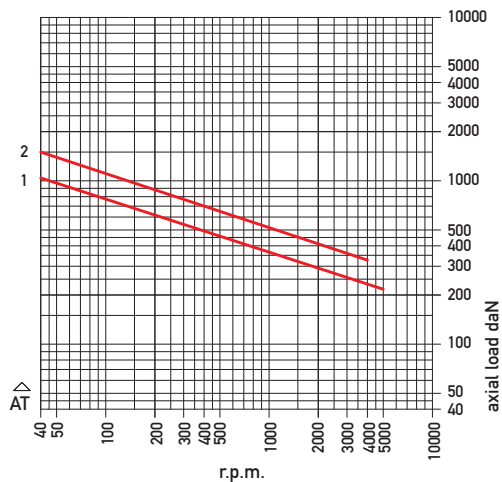
*observe the load graphs

Radial and axial loads for a bearing life of 2000 operating hours (see calculation example page 11)

Radial – Types TRS/TRV Capto



Axial – Types TRS/TRV Capto

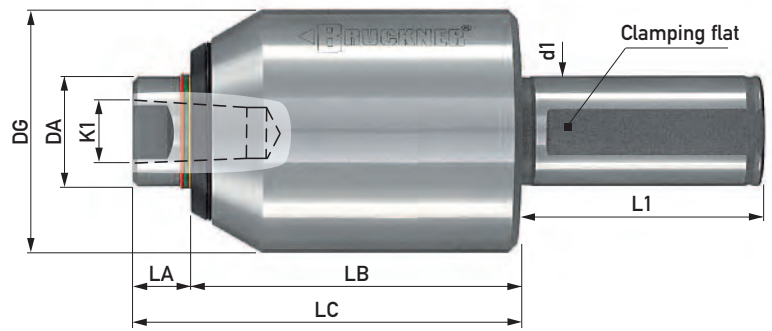


Cylindrical shank

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

Runout

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



Interchangeable 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
Suitable inserts		484..	484..	484..	487..	487..
Load	The radial load of type TRE is limited by the interchangeable inserts (page 37)					