

Superior Clamping and Gripping



TENDO E compact BT-DualContact

Hydraulic expansion toolholder with simultaneous taper and face contact

Superior Clamping and Gripping



TENDO E compact BT-DC (=Dual Contact)



The SCHUNK TENDO E compact hydraulic expansion toolholder with simultaneous taper and face contact closes the interface-dependent gap between tool flange and the front of the machine spindle with BT face contact interfaces.



Sizes

BT 30 mit Plananlage (Ø 20 mm)
 BT 30 mit Plananlage (Ø 12 mm)
 BT 40 mit Plananlage (Ø 12 mm)
 BT 40 mit Plananlage (Ø 20 mm)



Run-out accuracy

0,003 bei 2,5 x D



Torque

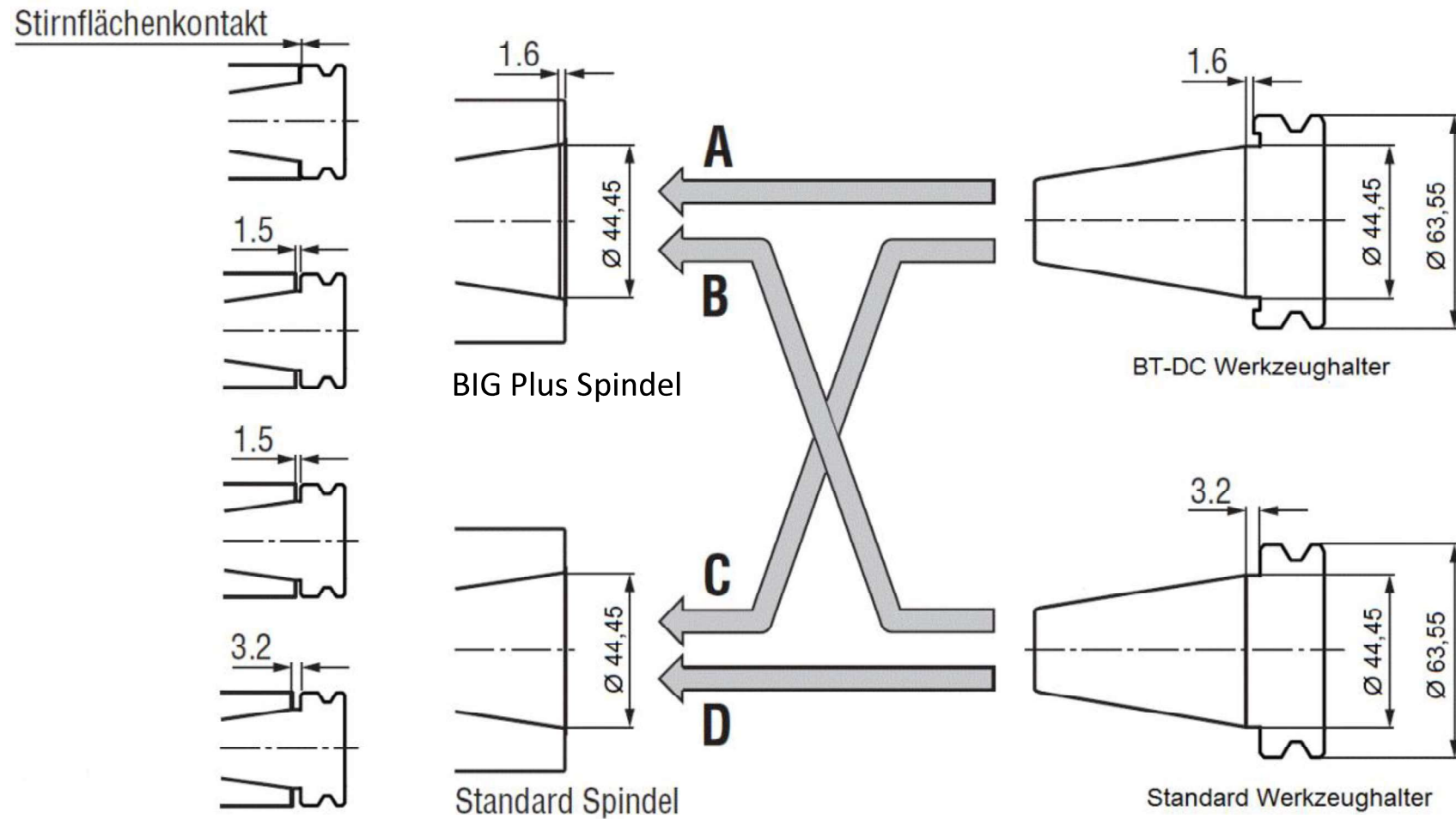
Ø 20: 400 Nm (BT 30 mit Plananlage)
 Ø 12: 110 Nm
 Ø 20: 520 Nm (BT 40 mit Plananlage)



Repeat accuracy

< 0,003 mm

TENDO E compact BT-DC Dual Contact

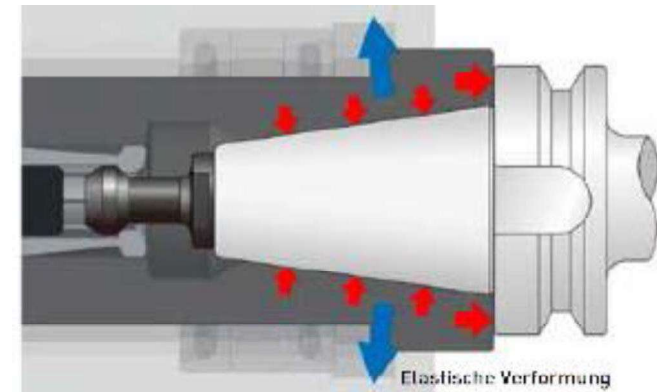


TENDO E compact BT-Dual Contact

Dual Contact is an extremely stable connection between the machine spindle and the tool holder, which is achieved through simultaneous taper and face contact of the tool holder in the machine spindle.

Advantages:

- Higher surface quality and dimensional accuracy
- Longer tool life
- Prevents fretting corrosion during heavy cutting
- Maximum repeat exchange accuracy with the tool changing system
- No axial displacement at high speeds
- Improved roundness in drilling machining



TENDO E compact BT-Dual Contact

BIG-PLUS® spindle systems + TENDO E compact BT-DC = „complete“ face contact

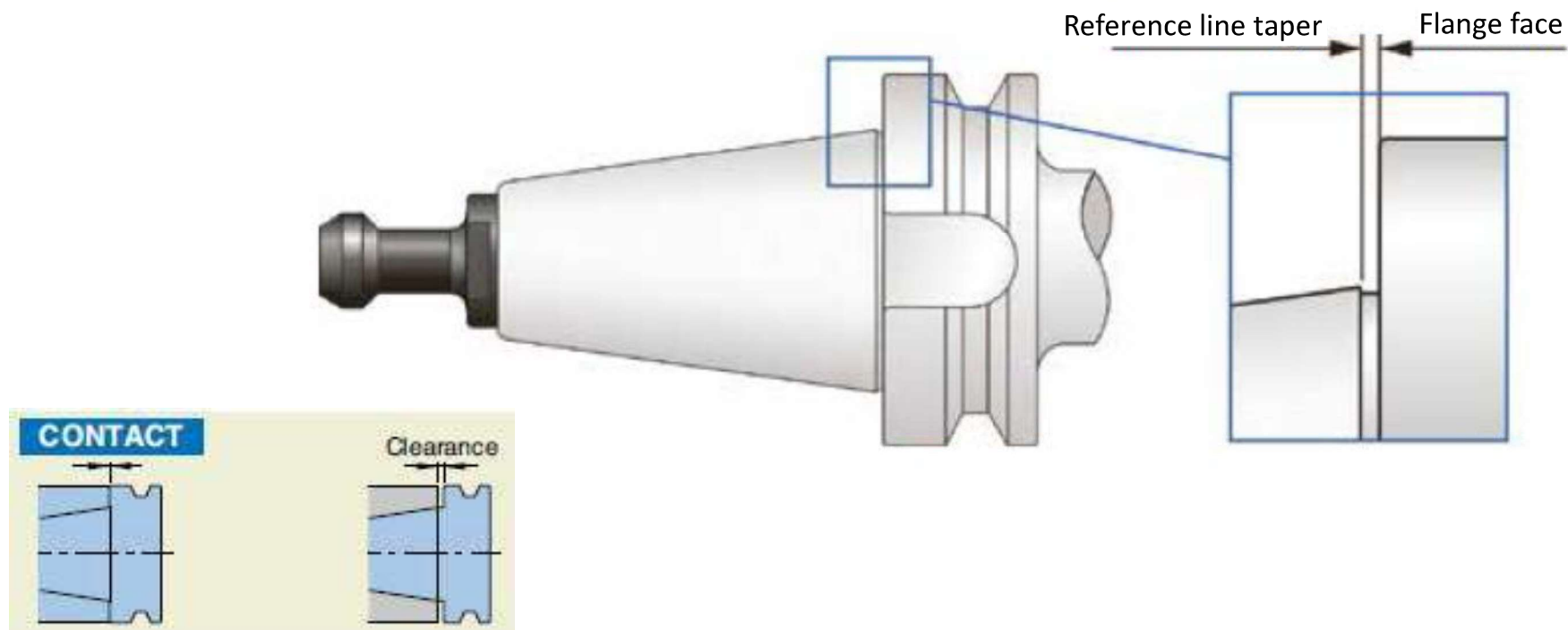
→ The systems of BIG-PLUS® machine spindles are necessary to achieve a „complete“ face contact in combination with TENDO compact BT-Dual Contact

- The BIG-PLUS® spindle systems are based on the latest available versions of the standards: ASME B5.50 (CAT), JIS B6339 (ISO 7388 / BT) und DIN 69871 (SK)
- In a conventional steep taper interface the taper base is the strongest connection point
- A BT-DC, BIG-PLUS® tool holder or a BT-DC from other competitors (Nikken, ShowaTools, NT-Tool, RegoFix, Albrecht, Gewefa, Sandvik, Zürn, etc.) is additionally supported on the flange face. This significantly increases the stability of the joint (simultaneous taper and face contact).

TENDO E compact BT-Dual Contact

Double contact works with a very low elastic deformation of the spindle.

The dimensions and tolerances of the distance from the reference line of the taper to the flange face are decisive for a correct, complete taper and face contact.



TENDO E compact BT-DC Dual Contact

Competitor with a Dual Contact version



BBT 30 Ø12 425.-€ - ca. 58% more expensive than SCHUNK BT-DC

BBT 30 Ø20 430.-€ - ca. 59% more expensive than SCHUNK BT-DC

BBT 40 Ø12 415.-€ - ca. 39% more expensive than SCHUNK BT-DC

BBT 40 Ø20 400.-€ - ca. 34% more expensive than SCHUNK BT-DC

BIG HDC Hydraulic Chuck



BT-AHO 30 Ø12 410.-€ - ca. 52% more expensive than SCHUNK BT-DC

BT-AHO 30 Ø20 410.-€ - ca. 52% more expensive than SCHUNK BT-DC

BT-AHO 40 Ø12 410.-€ - ca. 37% more expensive than SCHUNK BT-DC

BT-AHO 40 Ø20 410.-€ - ca. 37% more expensive than SCHUNK BT-DC

NT Tool Power Hydro Chuck PHC

TENDO E compact BT-DC Dual Contact

Wettbewerbsprodukte mit Plananlage



BTKV 40 Ø20 499.-€ - ca. 66% more expensive than SCHUNK BT-DC

BT 30 not in the standard / BT 40 only Ø20 available

Kennametal HydroForce HCTHT



BB30 930 Ø12 467.-€ - ca. 73% more expensive than SCHUNK BT-DC

BB30 930 Ø20 467.-€ - ca. 73% more expensive than SCHUNK BT-DC

BB40 930 Ø12 519.-€ - ca. 73% more expensive than SCHUNK BT-DC

BB40 930 Ø20 519.-€ - ca. 73% more expensive than SCHUNK BT-DC

SANDVIK Coro Chuck 930 – License from BIG Plus

TENDO E compact BT-DC Dual Contact

Wettbewerbsprodukte mit Plananlage



BT30 Ø12 455.-€ - ca. 70% more expensive than SCHUNK BT-DC

BT30 Ø20 455.-€ - ca. 70% more expensive than SCHUNK BT-DC

BT40 Ø12 503,50.-€ - ca. 68% more expensive than SCHUNK BT-DC

BT40 Ø20 503,50.-€ - ca. 68% more expensive than SCHUNK BT-DC

Gewefa Hydro-Dehnspannfutter with Dual Conact

BT30 Ø12 438.-€ - ca. 62% more expensive than SCHUNK BT-DC

BT30 Ø20 438.-€ - ca. 62% more expensive than SCHUNK BT-DC

BT40 Ø12 375.-€ - ca. 25% more expensive than SCHUNK BT-DC

Ø20 not in the standard

Mapal/WTE Hydro Chuck with Dual Contact

TENDO E compact BT-DC Dual Contact

Technische Daten | Technical data

D ₁	ID		D ₂	D ₃	D ₄	X	L ₁	L ₂	L ₃	L ₄	L ₅	L ₆	L ₇	G	M _{min}	Gewicht Weight	
[mm]			[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[Nm]	[kg]	
12.0	0206584	●	42.00	44.50	32.00	23.00	69.00	46.00	10.00	32.00	4.50	31.00	47.00	M8x1	110.00	0.60	9205650
20.0	0206586	●	42.00	44.50	38.00	39.00	90.00	51.00	10.00	50.00	5.00	37.00	68.00	M8x1	520.00	0.90	9205650

0206584 SDF-E compact BT-DC30 Ø12 L1=69 mm 269.-€

0206586 SDF-E compact BT-DC30 Ø20 L1=90 mm 269.-€



D ₁	ID		D ₂	D ₄	X	L ₁	L ₂	L ₃	L ₅	L ₆	L ₇	G	M _{min}	Gewicht Weight	
[mm]			[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[Nm]	[kg]	
12.0	0206594	●	42.00	32.00	12.00	58.00	46.00	10.00	4.50	31.00	31.00	M8x1	110.00	1.20	9205650
20.0	0206596	●	49.25	38.00	21.50	72.50	51.00	10.00	5.00	37.00	45.50	M8x1	520.00	1.40	9205650

Verfügbarkeit: ● lieferbar ab Lager ▲ kurzfristig lieferbar □ auf Anfrage

Availability: ● available ex stock ▲ short lead time □ on request

0206594 SDF-E compact BT-DC40 Ø12 L1=58 mm 299.-€

0206596 SDF-E compact BT-DC40 Ø20 L1=72,5 mm 299.-€

TENDO BT-Dual Contact - customers

BIG-PLUS SPINDLE SYSTEM MACHINE BUILDERS 167 manufacturers

The BIG-PLUS Spindle System is offered by many of the world's leading manufacturers of machining centers. Some of the machine and spindle builders who have produced BIG-PLUS spindles are as follows; [As of June, 2017]

ACCUWAY, Advanced Machine, ALEX-TECH, AMS, ANCA, Aono Giken, ARES, Asa Tech, AWEA, BERG Spanntechnik, BOST, brother, CERI, CHEVALIER, CHUO-SEIKI, CITIZEN, COLGAR, D.S. TECHNOLOGIE, DAH LIH, DAIYA SEIKI, DAITO, DIXI, DMC, DMG MORI SEIKI AD, DMG MORI SEIKI CO., LTD., DOOSAN, DYNOMAX, EGURO, ENSHU, Fadal, FAMOT, FANUC, FEMCO, First, FIRST, FISCHER, FOREST-LINÉ, FPT, FRANZ KESSLER, FUJI SEIKI, Giddings & Lewis, GMN, GTI, HARDINGE, HARTFORD, HISION, HNK, HOMMA, HORKOS, HOWA, HST, HURCO, HWACHEON, IBAG, IBARMIA, INNOVATEK, IKEGAI, INOUE KOSOKU KIKAI, JOBS, JOHNFORD, JTEKT, JUNGWOO M.S., JYOTI, KARATS, KASHIFUJI, KASWIN, KENTURN, KIRA, KITAMURA, KIWA, KMT, KOMATSU NTC, KONDIA, KOYO, Kptec, KURAKI, LAZZATI, MAG, MAGNIX, MAKINO, MAKINO SEIKI, MANDELLI, MATSUURA, MAZAK, MECTRON, MILLTRONICS, MITSUBISHI, MITSUBOSHI KOGYO, MITSUI SEIKI, MOTOKUBO, MTE, N.S.S, NACHI, NAKAMURA, NEO, Nicolás Correa, NIIGATA, NIPPON BEARING, NISHIJIMAX, NISSIN-mfg, NOMURA, Northland Tool, NSK, NUMEN, O-M, OBATAKE, OHTORI, OKK, OKUMA, OMLAT, OMV, PAMA, PIETRO CARNAGHI, PMC, QUASER, REIDEN, ROKU ROKU, ROYAL, RS TEC, SAJO, SEMPUCO, SETCO, SHAN RONG, SHODA, SHW, SKG, SKODA, SMEC, SNK, SODICK, SORALUCE, SPINDER, SPINTEC, Spintrue, SPS, StarragHeckert, STUDER, SUFENG, SUGINO, Sunwoo, SUPERIOR SPINDLE SERVICE, TAJMAC-ZPS, TAKAMAZ KIKAI KOUGYOU, TAKISAWA, TANABE, THETA, Tongtai, TOS KURIM, TOS VARNSDORF, TOSHIBA, TOYO SEIKI, TSUDAKOMA, TSUGAMI, UGint, UTSUNOMIYA, VICTOR Taichung, VTEC, VYU CHENG, WALDRICH COBURG, WELE, WIA, YAMASAKI GIKEN, YAMASHINA SEIKI, YASDA, Yasunaga, YCM, YU HUNG, ZAYER

Maschine-/Spindle manufactures which have a BIG Plus License & SCHUNK BIG Plus already SCHUNK BIG Plus

customer (like BOSCH, Schaeffler, Hirschvogel, Henke-Sass, Rolls-Royce, Aesculap, Koepfer, INDEX,.....)

TENDO E compact BT-Dual Contact – Flyer

(EN/DE)



Universal-Hydro-Dehnspannfutter
T | E | N | D | O® E compact BT-DC*

mit simultaner Kegel- und Plananlage

- + $< 0,003 \text{ mm}$
Randlauf- und Wechsel-
abweichungen, gewährleistet
beste Oberflächengüte
- + Beste Oberflächen
keine Rastmarken
- + Sekundärschneller
Werkzeugwechsel
permanenter Positionier-
genauigkeit, Einloch auf Anschlag
fahren
- + Bis zu 300 % höhere
Werkzeugstandzeiten
Dank der neuen Slack-
technologie, erhöht für
Produktionswechsel
am Refraktor (Produkt für
Technologie DIT)
- + Höchste Drehmomente –
jetzt bis 900 Nm
bei $\phi 30 \text{ mm}$ unter normalen
Spannbedingungen, 120 Nm
bei hohem Werkzeugdruck

* Dual Contact

Maximale Performance auf Steilkugelschnittstellen

TENDO E compact mit Kegel- und Plananlage schließt bei Maschinen mit BT-Plananlagen-Schnittstelle die schnittstellenbedingte Lücke zwischen Werkzeugflansch und der Stirnseite der Maschinenspindel. Das Hydro-Dehnspannfutter vereint hohe Spannkraft und eine exzellente Schwingungsdämpfung mit einer außerordentlichen Riga- und Torsionsfestigkeit für erstklassige Performance und Oberflächenqualität.

SCHUNK TENDO E compact mit simultaner Kegel- und Plananlage gibt es in den Schnittstellen BT 30 und BT 40 nach ISO 7388 mit den Spanndurchmessern $\phi 12 \text{ mm}$ und $\phi 20 \text{ mm}$.

TENDO E compact	ID
SDT-ET-40-ET-12-12	0105866
SDT-ET-40-ET-20-12	0105867
SDT-ET-40-ET-20-20	0105868
SDT-ET-40-ET-20-20	0105869



- 1. Spannschneide
- 2. Spannschneide
- 3. Spannschneide
- 4. Spannschneide
- 5. Spannschneide
- 6. Spannschneide
- 7. Spannschneide
- 8. Spannschneide
- 9. Spannschneide
- 10. Spannschneide
- 11. Spannschneide
- 12. Spannschneide

ID

1008420

TENDO E compact BT-DC Dual Contact

What is coming next?

- BT-DC 30 / 40 mit Inch Sizes / US Market
- CAT-DC 40 mit Inch Sizes Inch Längen / US Market



TENDO E compact BT-DC Dual Contact

Test setup FANUC RoboDrill – competitor comparison with Dual Contact products
/ TEC Center

