

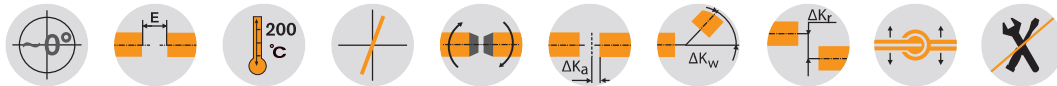
TOOLFLEX® S-H / M-H

Metal bellow-type couplings

Shell clamping hubs



For legend of pictogram please refer to flapper on the cover



TOOLFLEX® type S-H / shell clamping hubs - Hub material aluminium/bellow material stainless steel

Size	Finish bore d		Dimensions [mm]											
	Min.	Max.	General								Clamping screws DIN EN ISO 4762			
			L	I ₁ , I ₂	E	D _H	D _K	E ₁	t ₁	x ₁ /x ₂	e	M	T _A [Nm]	
20	8	20	51	19.5	12.0	40	41.2	26.0	5.5	12.5	14.5	M4	5.0	
30	10	28	68	25.5	17.0	55	57.7	34.0	7.5	17.0	19.0	M6	15.0	
38	12	38	78	30.0	18.0	65	72.6	36.0	9.5	21.0	25.0	M8	40.0	
45	14	45	94.5	36.0	22.5	83	88.8	46.5	11.0	24.0	30.0	M10	70.0	

Technical data TOOLFLEX® S-H

Size	Bellow-hub-connection	Torque of bellow T _{KN} ¹⁾ [Nm]	Max. speed [rpm]	Moment of inertia ²⁾ [x10 ⁻⁹ kgm ²]	Torsion spring stiffness C _T [Nm/rad]	Axial stiffness CA [N/mm]	Radial stiffness CR [N/mm]	Perm. displacements			Weight ²⁾ [kg]
								Axial [mm]	Radial [mm]	Angular [degree]	
20	Flanged	15	9550	28	9600	63	189	±0.4	0.15	1.0	0.110
30		35	6950	20	17800	97	233	±0.5	0.20	1.5	0.285
38		65	5850	42	37400	108	318	±0.6	0.20	1.5	0.422
45		170	4750	1003	95800	132	738	±0.9	0.20	1.5	0.897

TOOLFLEX® type M-H / shell clamping hubs - Hub material aluminium/bellow material stainless steel

Size	Finish bore d		Dimensions [mm]											
	Min.	Max.	General								Clamping screws DIN EN ISO 4762			
			L	I ₁ , I ₂	E	D _H	D _K	E ₁	t ₁	x ₁ /x ₂	e	M	T _A [Nm]	
20	8	20	58	19.5	19.0	40	41.2	33.0	5.5	12.5	14.5	M4	5.0	
30	10	30	77	25.5	26.0	55	57.7	43.0	7.5	17.0	19.0	M6	15.0	
38	12	38	90	30.0	30.0	65	72.6	48.0	9.5	21.0	25.0	M8	40.0	
45	14	45	111	36.0	39.0	83	88.8	63.0	11.0	24.0	30.0	M10	70.0	

Technical data TOOLFLEX® M-H

Size	Bellow-hub-connection	Torque of bellow T _{KN} ¹⁾ [Nm]	Max. speed [rpm]	Moment of inertia ²⁾ [x10 ⁻⁹ kgm ²]	Torsion spring stiffness C _T [Nm/rad]	Axial stiffness CA [N/mm]	Radial stiffness CR [N/mm]	Perm. displacements			Weight ²⁾ [kg]
								Axial [mm]	Radial [mm]	Angular [degree]	
20	Flanged	15	9550	29	9600	63	189	±0.4	0.15	1.0	0.115
30		35	6950	138	17800	97	233	±0.5	0.20	1.5	0.304
38		65	5850	310	37400	108	318	±0.6	0.20	1.5	0.445
45		170	4750	1069	95800	132	738	±0.9	0.25	1.5	0.947

¹⁾ For selection see page 22 et seqq.

²⁾ Figures refer to the complete coupling with max. bore.

To make sure that the coupling can be assembled/disassembled radially, please observe the insertion dimension x₁/x₂ of the shafts.

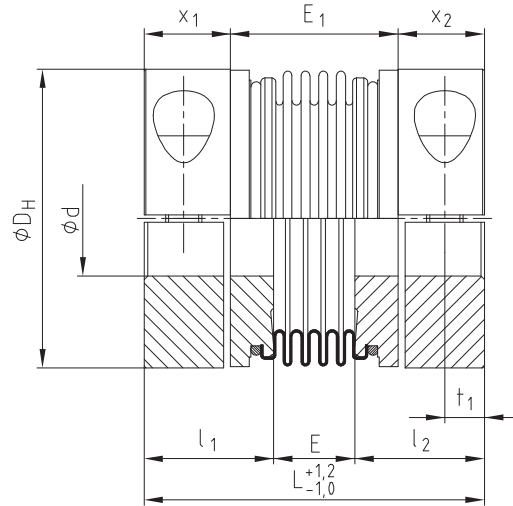
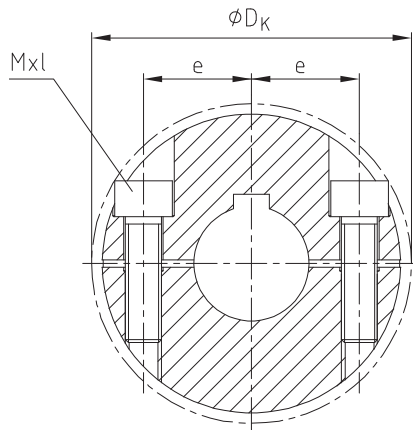
Review of shaft-hub-connection: Friction torques T_R [Nm] for hub design 2.5 for Ød₁/Ød₂

Size	Ø8	Ø9	Ø10	Ø11	Ø12	Ø14	Ø15	Ø16	Ø18	Ø19	Ø20	Ø24	Ø25	Ø28	Ø30	Ø32	Ø35	Ø38	Ø40	Ø42	Ø45	
20	12.5	14.1	15.7	17.2	18.8	21.9	23.5	25.1	28.2	29.8	31.3											
30			31.8	35.0	38.2	44.5	47.7	50.9	57.3	60.4	63.6	76.3	79.5	89.1								
38					74.9	87.4	93.7	99.9	112.4	118.6	124.9	149.9	156.1	174.8	187.3	199.8	218.5	237.3				
45						123.4	132.2	141.0	158.6	167.4	176.2	211.5	220.3	246.7	264.4	282.0	308.4	334.9	352.5	370.1	396.5	

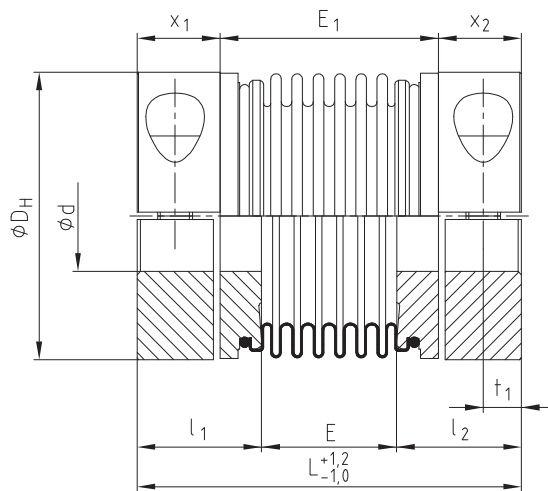
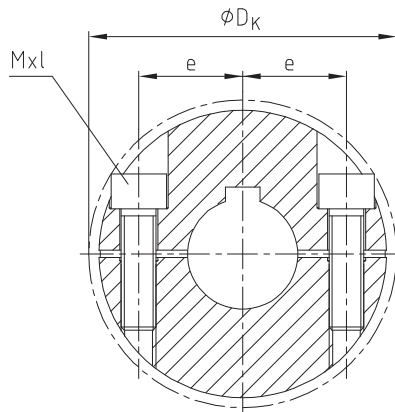
Ordering example:

TOOLFLEX® 30 S-H	7.8 - Ø25				7.9 - Ø30			
Size and type of coupling	Hub design	Finish bore	Hub design	Finish bore				

TOOLFLEX® S-H



TOOLFLEX® M-H



ROTEX® GS

Backlash-free
servo couplings

TOOLFLEX®

RADEX®-NC

Types of hubs

Type 7.8



clamping hub type H without feather keyway for single-cardanic connection

Type 7.9



clamping hub type H with feather keyway for single-cardanic connection (on request)

COUNTEX®