

6.2.5 Deflection belt drive

The use of a deflection belt drive allows the reducing of the total length from Linear Axis with screw drive significantly. This gives the possibility of using in restricted spaces and an optimal utilization of the available installation space. Deflection belt drives are available for Linear Axis of the series AXC, AXF, AXDL, AXLT and AXBG (Figure 6.38).

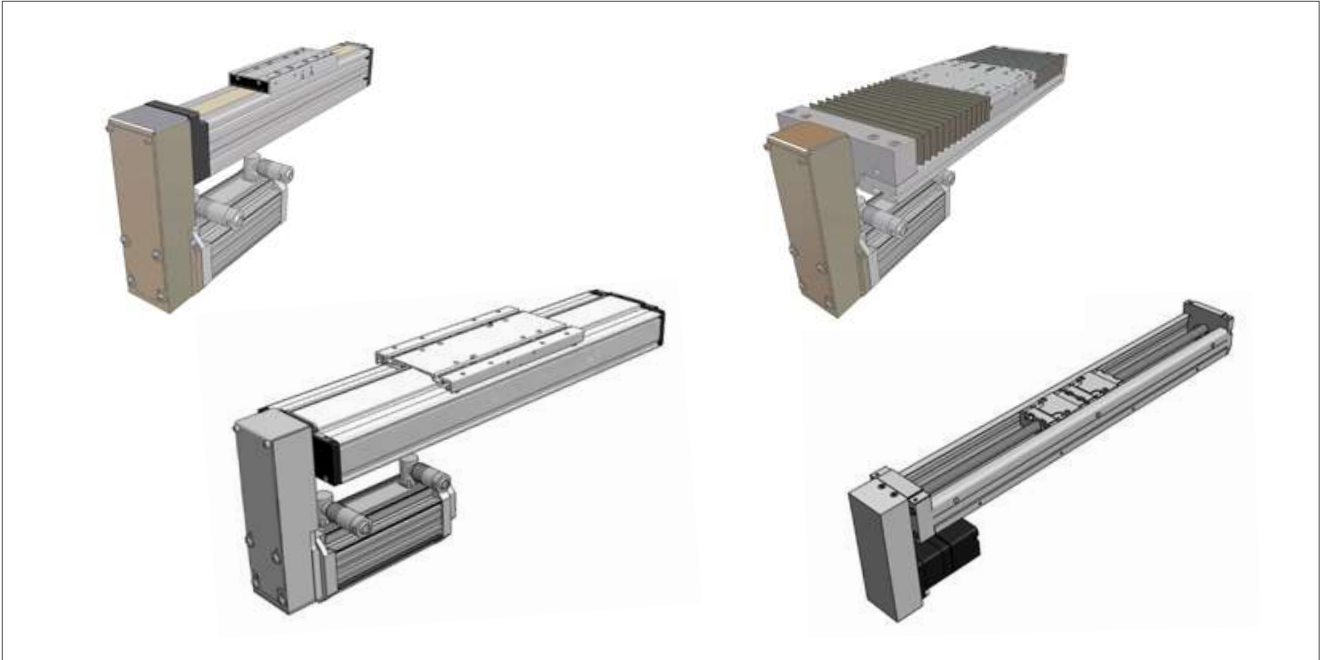


Figure 6.38 — Linear Axis with deflection belt drive

The installation position can be made with 90° offset (Figure 6.39).

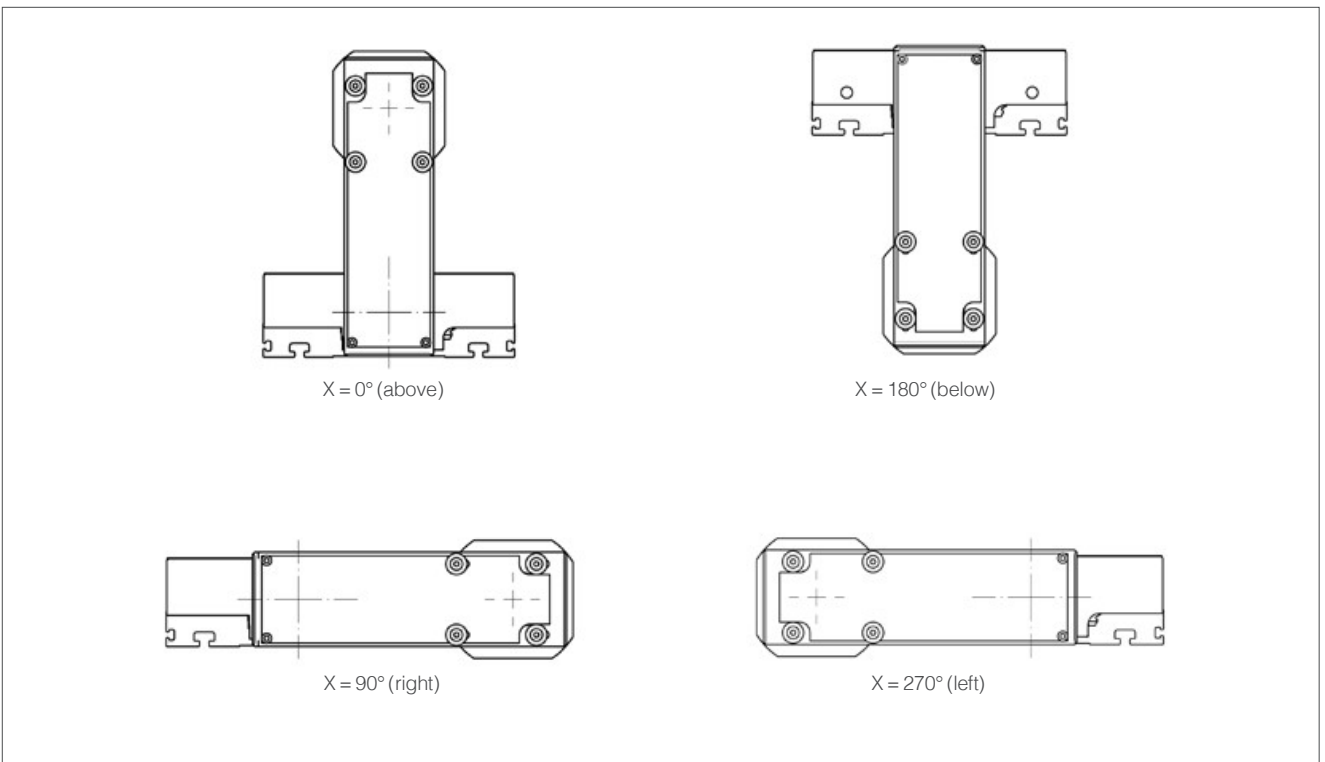


Figure 6.39 — Installation positions of deflection belt drives

Depending on the series and the ratio of the deflection belt drive is it possible to use drives with a smooth shaft or with feather key, which requires different maximum shaft diameter.

In Table 6.29 the maximum drive shaft diameter of the different versions are summarized.

Table 6.29 — Maximum drive shaft diameters for deflection belt drives

Type	Fixation with clamping set Ratio						Fixation with feather key Ratio								Fixation with glue connection Ratio												
	1,00	1,25	1,50	1,60	1,80	2,00	1,00	1,25	1,50	1,60	1,80	2,00	2,25	2,40	2,50	3,20	1,00	1,25	1,50	1,60	1,80	2,00	2,25	2,40	2,50	3,20	4,00
AXBG33	8						8																				
AXBG46	11						11																				
AXC40	9						14	9								14	11										
AXC60 AXDL110 AXLT155	14							14	11	9						14	14	9									
AXC80 AXC100 AXF100 AXDL160 AXLT225	16	14	14				24	19	16		12		9		24	24	19		14			11					
AXC120 AXDL240 AXLT325	24		14	10				24	19	14	11					24	24	24	14	11							
AXLT455	28	28	28	19							28								28								

The dimensions of the deflection belt drives are shown in Figure 6.40 and Table 6.30.

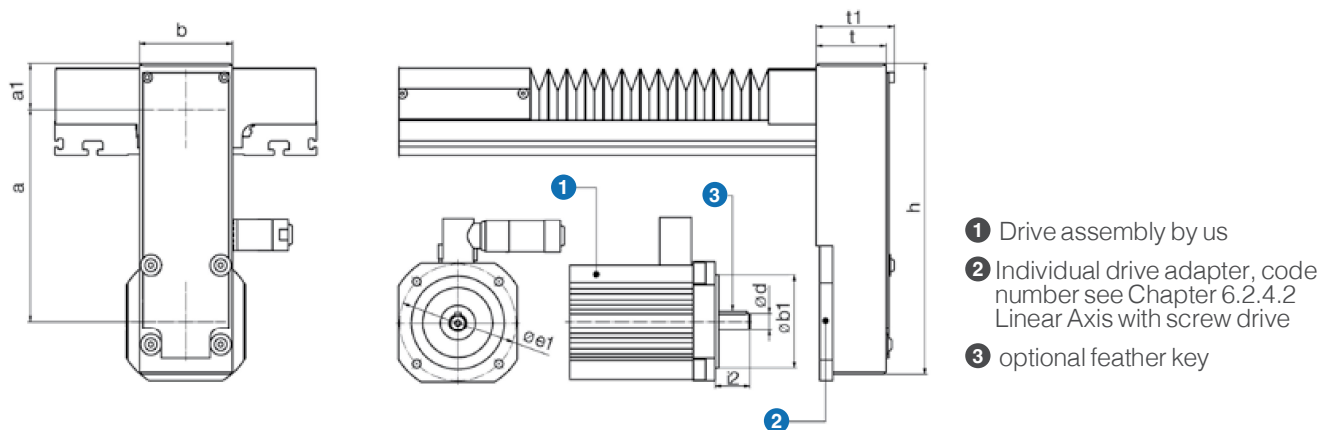


Figure 6.40 — Dimensions of deflection belt drives

Table 6.30 — Dimensions of deflection belt drives

Type	Ø b1 [mm]		Ø e1 [mm]		i2 [mm]		Desing type	a [mm]	a1 [mm]	b [mm]	h [mm]	t [mm]	t1 [mm]
	min.	max.	min.	max.	min.	max.							
AXBG33	30		46		25			72 ± 2,5	21,0	42	117	28	--
AXBG46	50		70		30			102 ± 2,5	31,0	62	167	24	--
AXC40	40	50	63	70	20	30	B5	67,5 + 8	23,6	50	128	41	44
AXC60 AXDL110 AXLT155	40 ¹	60	63	75	20	30	B5	140,5 ± 2	31,5	60	216	40	45
AXC80 AXC100 AXF100 AXDL160 AXLT225	50 ¹	80	63	100	20	50	B5	185 ± 2,5	39,0	80	267	60	67
AXC120 AXDL240 AXLT325	60 ¹	110	75	130	30	50	B5 / B14	249,5 ± 5,5	57,0	100	407	60	67
AXLT455	80 ¹	130	100	165	30	60	B5 / B14	354 ± 5	89,0	180	565	80	89

¹ For drives with smaller centering, the centering by the drive adapter omitted