

**WestMARC Knee Guide for Prosthetic Multidisciplinary Team**

**Mechanical Knees: free polycentric**

	4 bar						Multibar	
	<i>Alignment (geometric stability)</i>						<i>Geometric locking</i>	
NAME	3R36 Habermann	S500	NOFM1	3R106	3R55	3R60	Total TK1900 TK2000 TK2100	N0H7
	Ottobock	Blatchford	Ossur	Ottobock	Ottobock	Ottobock	Ossur	Ossur

General	Activity level (see Appendix 2 in full guide)	1-2	1-2	L-M	2-3	3-4	2-3	L-E	M-E
	Weight of unit (gms)	445	882	590-720	755-790	720	845-940	675, 690, 900	930
	MAX KNEE FLEXION ANGLE	110	145	150	170	110	175	160	150
	Max weight of Pt (kgs)	100	125	136	100	125	125	100,100,125	136
	FULL HIP EXTENSION or flexion accommodated	Crucial	Crucial	Crucial	Crucial	Crucial	Crucial	Crucial	Crucial
	GOOD RESIDUAL LIMB STRENGTH REQUIRED	No	Beneficial	Yes	No	Yes	No	No	No

Prosthetic Stance Control	Weight activated lock	No	No	No	No	No	No	No	No
	Geometric lock	No	No	No	No	No	No	Yes	Yes
	Optional Manual Lock	No	No	Yes	No	No	No	No	No
	Mechanical stance flexion at initial contact	No	No	Yes	No	No	Yes	Yes	No
	Load activated hydraulic yield	No	No	Yes	No	No	No	No	No
	Position dependent hydraulic yield	No	No	Yes	No	No	No	No	No
	Microprocessor	No	No	Yes	No	No	No	No	No
	Alignment only	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No

		<i>Alignment (geometric stability)</i>						<i>Geometric locking</i>	
NAME		3R36 Habermann	S500	NOFM1	3R106	3R55	3R60	Total TK1900 TK2000 TK2100	N0H7
Prosthetic Swing Control	Locked	No	No	No	No	No	No	No	No
	Optional Manual Lock	No	No	No	No	No	No	No	No
	Constant Friction	Yes	No	Yes	No	No	No	Yes, 1900	No
	Extension assist	Yes	Yes	Yes	No	No	No	Yes, 1900	No
	Pneumatic (cadence responsive)	No	Yes	No	Yes	No	No	No	No
	Hydraulic (cadence responsive)	No	No	No	No	Yes	Yes	Yes	Yes
Implications for gait training	<i>For Loading Response</i>								
	Actively extend hip & prosthetic knee	Yes	Yes	Yes	Yes	Yes	No	Yes, 1900	Yes
	Allow hip & prosth knee to flex under load ⊗ pg **	No	No	No	No	No	Yes	Yes	No
	<i>At pre-swing:</i>								
	Unload toe and hip hitch	No	No	No	No	No	No	No	No
	Normal weight transference along foot (hip ahead of knee)	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Load toe ⊗ pg **	No	No	No	No	No	No	Yes	Yes	
Sitting	As normal with no support from knee	No	No	No	Yes	No	No	No	No
	As normal with hydraulic flexion resistance sitting assist	No	No	No	No	No	No	No	No
	Weight on toe (foot behind)	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
	Unload foot	No	No	No	No	No	No	No	No
Stairs	Step together	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Foot over foot yield- Foot half off step	No	No	No	No	No	No	No	No
Slopes	Step together	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
	Foot over foot	No	No	No	No	No	Yes, shallow	Yes, shallow (2000, 2100)	No

