

		Edition 2021-1		
<b>BMW Group standard data Logistics values</b>		Time unit		
		TMU 1	Min. 0.0006	Sec. 0.036

Marking and documenting		Code	Distance range			Code no.	
			1	2	3		
Hand-guided writing implement	per character, digit, letter	first activity	M-MSZE	60	80	95	120 x
		further activity	M-MSZWX	20			121 0
		additional point	M-MSZZ	40	50	55	122 x
Rubber stamp	approx. > 12 mm	first activity	M-MGUE	30	55	80	123 x
		additional point	M-MGUZ	15	30	40	124 x
	exactly ≤ 12 mm	first activity	M-MGGE	45	70	90	125 x
		additional point	M-MGGZ	25	40	50	126 x
Scanning	loose 3 mm ≤ 12 mm	first activity	M-MCGE	85	105	120	127 x
		additional point	M-MCGZ	65	75	80	128 x

General process steps		Code	TMU	Code no.	
Actuation	Lever switching	L-TVBXH	18	600 0	
	Joystick or similar	L-TVBJ	10	601 0	
Additional steps	Starting/switching off engine	L-TVZXM	87	602 0	
	Applying/releasing parking brake	L-TVZXF	120	603 0	
	Fastening/taking off seat belt	L-TVZG	175	604 0	
	Opening/closing driver's door	L-TVZXT	110	605 0	
Entering and exiting the vehicle	seated	raised seat position	L-TVFSE	270	606 0
		normal seat position	L-TVFSN	160	607 0
	standing	near the ground	L-TVFTB	50	608 0

Preparatory activities		Code	Distance range ≤ 80 cm	Code no.	
Removing the slip cardboard lid	≤ 30 x 30 x 30 cm	M-VAAXX	65	300 0	
	≤ 80 x 80 x 80 cm	M-VABXX	105	301 0	
Opening the folding cardboard box	≤ 30 x 30 x 30 cm	M-VBAXX	540	302 0	
	≤ 80 x 80 x 80 cm	M-VBBXX	600	303 0	
Opening/closing the wire mesh container	≤ 120 x 100 x 90 cm	M-VCCXX	110	304 0	
Opening the bag	with tool	M-VDHXX	185	305 0	
	without tool	M-VDIXX	115	306 0	
Placing KLT container onto/removing it from the flow rack	full	L-RDBXV	103	846 0	
	empty	L-RDBXL	53	847 0	
Removing/inserting flexible intermediate plates	≤ 30 x 30 cm	M-VFDXX	85	309 0	
	≤ 120 x 100 cm	M-VFEXX	105	310 0	
Removing/inserting rigid intermediate plates	≤ 30 x 30 cm	M-VGDXX	60	311 0	
	≤ 120 x 100 cm	M-VGEXX	75	312 0	
Folding the folding box open/closed	approx. 60 x 40 x 30 cm	M-VHKXX	185	313 0	
Dimple tape	opening and discarding	without tool	M-VIIXX	115	314 0
	close	without tool	M-VKIXX	85	316 0
PVC/steel belt, removing wire	a cutting point	M-VJXX	265	315 0	

Transportwagen / Transport trolley		Code	TMU	Code no.	
Fahren / Driving	Start und Stopp / Start and stop	≤ 25 N	B-TFSA	36	851 0
		> 25 N ≤ 150 N	B-TFSB	59	852 0
		> 150 N ≤ 230 N	B-TFSC	74	853 0
		> 230 N ≤ 280 N	B-TFSD	79	854 0
		> 280 N ≤ 335 N	B-TFSE	95	855 0
		> 335 N ≤ 415 N	B-TFSF	112	856 0
	> 415 N ≤ 495 N	B-TFSG	136	857 0	
	pro Meter / per Meter	≤ 25 N	B-TFMA	18	861 0
		> 25 N ≤ 150 N	B-TFMB	20	862 0
		> 150 N ≤ 230 N	B-TFMC	25	863 0
		> 230 N ≤ 280 N	B-TFMD	29	864 0
		> 280 N ≤ 335 N	B-TFME	35	865 0
		> 335 N ≤ 415 N	B-TFMF	45	866 0
	> 415 N ≤ 495 N	B-TFMG	55	867 0	
	Kurve ≥ 90° / Bend ≥ 90°	≤ 25 N	B-TFKA	11	871 0
		> 25 N ≤ 150 N	B-TFKB	12	872 0
		> 150 N ≤ 230 N	B-TFKC	15	873 0
		> 230 N ≤ 280 N	B-TFKD	17	874 0
		> 280 N ≤ 335 N	B-TFKE	21	875 0
		> 335 N ≤ 415 N	B-TFKF	27	876 0
> 415 N ≤ 495 N	B-TFKG	33	877 0		
zusätzliches Ausrichten / additional alignment	≤ 25 N	B-TFAA	83	881 0	
	> 25 N ≤ 150 N	B-TFAB	118	882 0	
	> 150 N ≤ 230 N	B-TFAC	141	883 0	
	> 230 N ≤ 280 N	B-TFAD	153	884 0	
	> 280 N ≤ 335 N	B-TFAE	185	885 0	
	> 335 N ≤ 415 N	B-TFAF	222	886 0	
> 415 N ≤ 495 N	B-TFAG	270	887 0		

Manual pallet jack		Code	TMU	Code no.	
Driving	Start and stop	≤ 500 kg	L-HFXSA	80	770 0
		> 500 kg	L-HFXSB	150	771 0
	per metre	≤ 500 kg	L-HFXMA	30	772 0
		> 500 kg	L-HFXMB	35	773 0
	Bend ≥ 90°	≤ 500 kg	L-HFXKA	15	774 0
		> 500 kg	L-HFXKB	19	775 0
Transported goods	Picking up	≤ 500 kg	L-HTAOA	345	776 0
		> 500 kg	L-HTAOB	415	777 0
	Positioning	≤ 500 kg	L-HTPOA	115	780 0
		> 500 kg	L-HTPOB	125	781 0
	additional alignment	≤ 500 kg	L-HAXXA	115	784 0
		> 500 kg	L-HAXXB	180	785 0

	Edition 2021-1		
	Time unit		
	TMU	Min.	Sec.
	1	0.0006	0.036

## BMW Group standard data Logistics values

Automated pallet jack		Code	TMU	Code no.
Driving	Start and stop - parking	L-GFDXX	135	620 0
	Start and stop - stopping	L-GFSXX	70	622 0
	per metre	L-GFMXX	25	660 0
	Bend ≥ 90°	L-GFKXX	27	661 0
Picking up and positioning the load	Basic value	Ground - ground	L-GLBBX	550 662 0
	Transport height per 10 cm	Picking up	L-GLTAX	26 663 0
		Positioning	L-GLTPX	32 664 0
	additional alignment	L-GLAXX	105	665 0

Tow tractor		Code	TMU	Code no.
Driving	Start and stop - parking	with trailer	L-EFEXM	251 739 0
		without trailer	L-EFEXO	233 739 5
	Start and stop - stopping	with trailer	L-EFSXM	91 740 0
		without trailer	L-EFSXO	73 741 0
	per metre per 1 km/h *	L-TVGMX	100	609 0
	Bend ≥ 90°	with trailer	L-EFKXM	27
without trailer		L-EFKXO	22	747 0
Connecting a trailer	aligning with trailer	L-EAXMX	368	748 0
	aligning without trailer	L-EAXOX	258	749 0
Disconnecting a trailer	aligning with trailer	L-EBXMX	285	750 0
	aligning without trailer	L-EBXOX	180	751 0

\* Speed [km/h] in the divider; distance [m] in the multiplier

Tugger train			Code	TMU	Code no.
Driving	Start and stop - parking	seated	L-RFESX	255	826 0
		standing	L-RFETX	145	828 0
	Start and stop - stopping		L-RFSXX	95	830 0
	per metre per 1 km/h *		L-TVGMX	100	609 0
	Bend ≥ 90°		L-RFKXX	26	833 0
Connecting a trailer	without air supply	manual	L-RAOMX	285	834 0
		semi-automatic	L-RAOHX	75	835 0
	with air supply	manual	L-RAMMX	340	836 0
		semi-automatic	L-RAMHX	190	837 0
Disconnecting a trailer	without air supply	manual	L-RBOMX	245	838 0
		semi-automatic	L-RBOHX	45	839 0
	with air supply	manual	L-RBMMX	295	840 0
		semi-automatic	L-RBMHX	155	841 0
Loading module	E-type frames	loading	L-RLEXB	136	842 0
		unloading	L-RLEXE	151	843 0
	C-frame trolley	loading	L-RLCXB	178	844 0
		unloading	L-RLCXE	193	845 0
Flow rack	per KLT container	full	L-RDBXV	103	846 0
		empty	L-RDBXL	53	847 0

\* Speed [km/h] in the divider; distance [m] in the multiplier

Forklift truck			Code	TMU	Code no.
Driving	Start and stop - parking		L-SFEXX	656	700 0
	Start and stop - stopping		L-SFSXX	60	702 0
	per metre per 1 km/h *		L-TVGMX	100	609 0
	Bend ≥ 90°		L-SFKXX	30	731 0
	Turning 180°		L-SFWXX	102	732 0
Picking up and positioning the load	Basic value	Ground - ground	Forklift truck	L-SLBBF	485 733 0
			Reach truck	L-SLBBS	643 734 0
	Transport height per 10 cm	Picking up	L-SLTAX	12	735 0
		Positioning	L-SLTPX	11	736 0
	Long fork (>1.2 m)		L-SLLXX	135	737 0
	Exchanging containers "empty in exchange for full"	Forklift truck	L-SLVXF	2202	738 0
Reach truck		L-SLVXS	2834	738 5	

\* Speed [km/h] in the divider; distance [m] in the multiplier