

## BMW Group standard data Basic values & Master data

Picking up and positioning				Code	Distance range			Code no.	
≤ 1 kg	easy	one part or simultaneously	approx.	B-AAE	18	33	46	1 x	
			difficult	two parts	loose	B-ABE	27	43	57
tight					B-ACE	38	54	68	3 x
approx.		B-AAZ			18	34	47	4 x	
one part		loose		B-ABZ	43	61	75	5 x	
		tight		B-ACZ	66	84	98	6 x	
	approx.	B-ADE		20	39	52	7 x		
> 1 kg - ≤ 8 kg	one part	loose	B-AEE	29	49	63	8 x		
		tight	B-AFE	40	60	74	9 x		
		approx.	B-ADZ	27	46	60	10 x		
	two parts	loose	B-AEZ	52	73	88	11 x		
		tight	B-AFZ	75	96	111	12 x		
		approx.	B-AES	36	55	69	13 x		
> 8 kg - ≤ 22 kg	simultaneously	loose	B-AFS	47	67	81	14 x		
		tight	B-AGHX	40	57	70	15 x		
		approx.	B-AGHR	50	74	93	16 x		
	handful	approx.	B-AHE	24	40	54	17 x		
		loose	B-AJE	38	55	69	18 x		
		tight	B-AKE	49	66	81	19 x		
> 22 kg	two parts	approx.	B-AHZ	30	46	60	20 x		
		loose	B-AJZ	65	84	98	21 x		
		tight	B-AKZ	88	106	122	22 x		
	one part	approx.	B-ALE	49	66	82	23 x		
		loose	B-AME	63	82	98	24 x		
		tight	B-ANE	74	93	110	25 x		

Positioning		Code	Distance range			Code no.
			1	2	3	
One part	approx.	B-PAE	8	17	24	26 x
	loose	B-PBE	20	29	33	27 x
	tight	B-PCE	30	38	45	28 x
Two parts	approx.	B-PAZ	9	18	25	29 x
	loose	B-PBZ	39	50	51	30 x
	tight	B-PCZ	60	69	75	31 x

Cyclical motions		Code	Distance range			Code no.
			1	2	3	
One motion		B-ZA	5	15	20	32 x
Sequence of motions		B-ZB	10	30	40	33 x
Repositioning and one motion		S-ZCX	30	45	55	34 x
Applied pressure > 10 N		B-ZD	17			35 0

Actuation		Code	Distance range			Code no.
			1	2	3	
Operating element	simple actuation	B-BE	10	25	40	36 x
	combined actuation	B-BZ	30	45	60	37 x

Body motions		Code	TMU	Code no.
Walking up to 1 m, turning the body, one step or climbing a ladder	≤ 15 kg	B-KAA	20	38 0
	> 15 kg - ≤ 23 kg	B-KAB	27	39 0
	> 23 kg - ≤ 28 kg	B-KAC	30	40 0
Bending, stooping, kneeling including standing again		B-KB	61	41 0
Sitting and standing		B-KC	109	42 0

Visual inspection		Code	TMU	Code no.
Yes/no decision		B-VK	15	43 0

Reading		Code	TMU	Code no.
Three digits, three letters	without aid	B-LO	15	46 0
	with aid (such as AR or VR goggles)	B-LM	8	59 0

Using aids		Code	Distance range			Code no.	
			1	2	3		
One aid	approx.	first activity	S-HEUE	35	55	75	47 x
		additional point	S-HEUZ	20	30	35	48 x
	loose	first activity	S-HELE	50	70	85	49 x
		additional point	S-HELZ	30	40	45	50 x
	tight	first activity	S-HEEE	60	80	95	51 x
		additional point	S-HEEZ	40	50	55	52 x
Two aids	approx.	first activity	S-HZUE	50	70	90	53 x
		additional point	S-HZUE	30	40	45	54 x
	loose	first activity	S-HZLE	80	100	115	55 x
		additional point	S-HZLZ	50	60	65	56 x
	tight	first activity	S-HZEE	95	115	130	57 x
		additional point	S-HZEE	65	75	80	58 x

Process		Code	TMU	Code no.
Uncontrollable activity time, TTU	Employee-dependent process	S-PTG	1	90 0
	Employee-independent process	S-PTU	1	91 0

Extra information	
Distance range 1 = ≤ 20 cm // Distance range 2 = > 20 cm bis ≤ 50 cm // Distance range 3 = > 50 cm bis ≤ 80 cm	
Bulkiness at > 30 cm x 30 cm or > 900 cm <sup>2</sup> or > 80 cm -> next higher weight class	
approximately: > 12 mm or against a stop // loose: without pressure or > ± 1.5 mm to ≤ ± 6.0 mm // tight: with pressure or ≤ ± 1.5 mm simultaneously = two Parts with a common joint	
Formulas and Conversion: Circumference = Ø x π (3.14) // 1 kg ≈ 10 N // 10 N ≈ 1 kg	