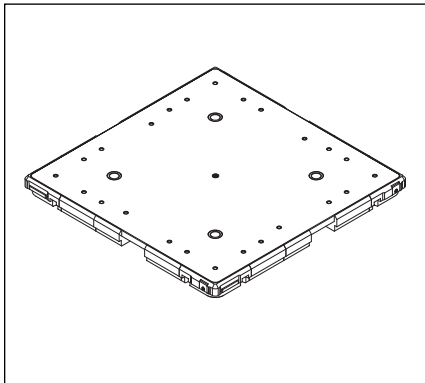


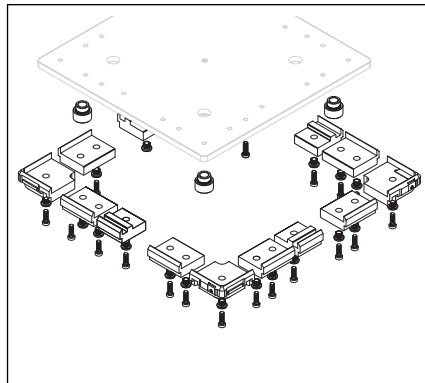
## Workpiece Pallets

## Section 2—Workpiece Pallets

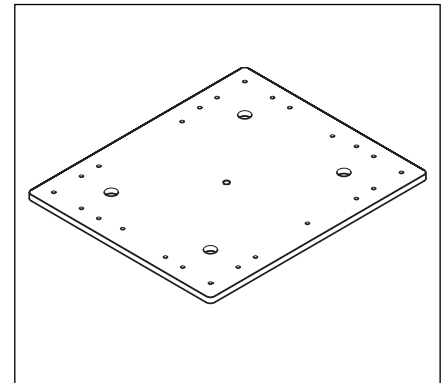
The WT4-S workpiece pallet forms the heart of the TS4plus system. The edge-guided pallets are available in a wide range of sizes and with two different aluminum pallet plate thicknesses to fit your production needs. They can be ordered fully assembled, or purchased in kits of individual components for on-site assembly, with or without the pallet plate. A very lightweight, open center (frame) style pallet is also available.

**2**

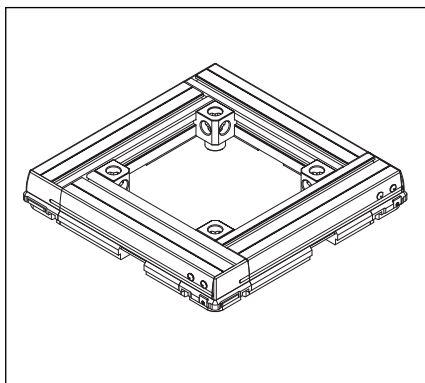
**WT4-S, WT4-S-H**  
*Assembled Workpiece Pallets*  
2-2 to 2-3



**WT4-S**  
*Workpiece Pallet Frame Kits*  
2-4 to 2-5



**WT4-S, WT4-S-H**  
*Aluminum Pallet Plates*  
2-6 to 2-9

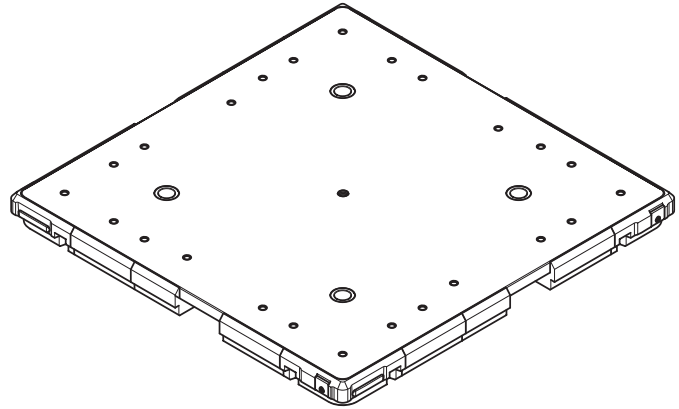


**WT4-S/F**  
*Assembled Open Center Pallets*  
2-10 to 2-11

Workpiece Pallets

# Assembled Workpiece Pallets

## Model WT4-S, WT4-S-H



Fully assembled TS4plus workpiece pallets are available in 15 standard sizes ranging from 443 x 443mm to 1243 x 1243mm.

The workpiece pallets consist of frame modules (corners and extensions) and a support plate. The frame modules are made from electrically conductive UHMW-PE and include horizontal exciter plates to indicate relative positioning when used in conjunction with proximity switches. The frame modules also include integrated bumpers, which dampen the impact of pallet-to-pallet contact. The support plate is made of aluminum (12.7mm or 19.1mm thick).

Assembled workpiece pallets also have four pressed-in hardened steel positioning bushings which provide precise location of the workpiece pallet for automated assembly operations when used with Rexroth positioning modules. M8x25 screws (quantities vary according to pallet size) are used to secure the frame modules to the support plates.

### Workpiece Pallet Payloads (in kg)

Workpiece Pallet load-bearing edge L <sub>WT</sub> or B <sub>WT</sub> in mm	Maximum Load in kg*
443	85
643	125
843	165
1043	210
1243	250

\* Maximum load is the combined weight of all pallet components, fixture, and parts. Please refer to Section 8 for application notes on pallet payloads as they relate to load application points.

### Ordering Information for Assembled Workpiece Pallets WT4-S with 12.7 mm pallet plates

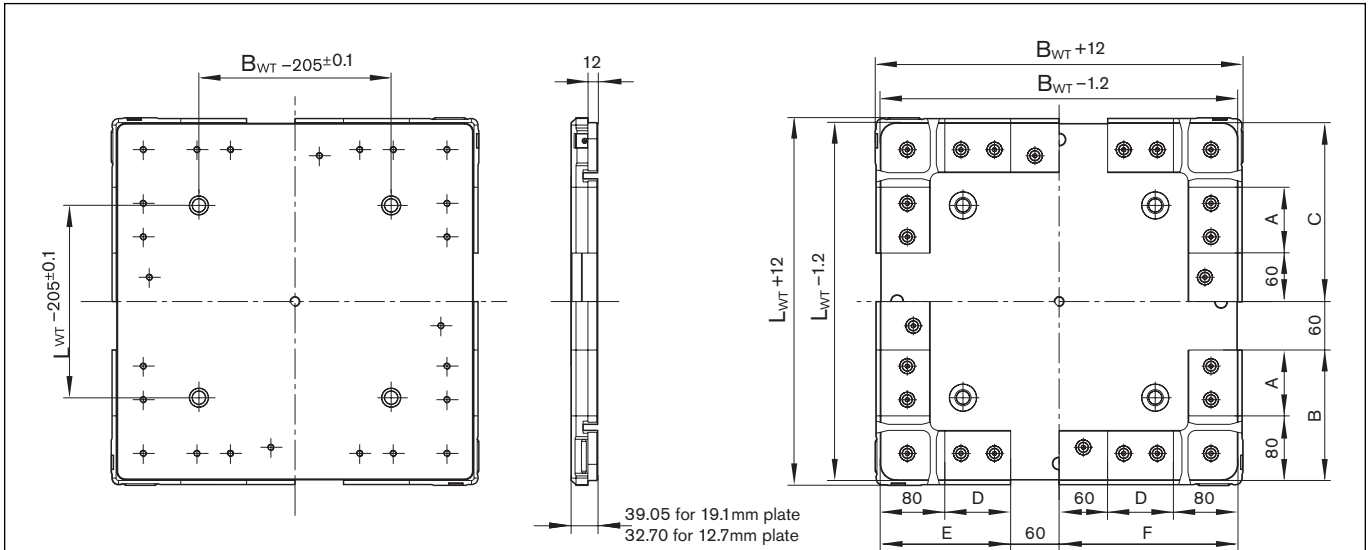
		Width (B <sub>WT</sub> )				
		443	643	843	1043	1243
Length (L <sub>WT</sub> )	443	8981 021 890	•	•	•	•
	643	8981 021 891	8981 021 895	•	•	•
	843	8981 021 892	8981 021 896	8981 021 899	•	•
	1043	8981 021 893	8981 021 897	8981 021 900	8981 021 902	•
	1243	8981 021 894	8981 021 898	8981 021 901	8981 021 903	8981 021 904

### Ordering Information for Assembled Workpiece Pallets WT4-S-H with 19.1 mm pallet plates

		Width (B <sub>WT</sub> )				
		443	643	843	1043	1243
Length (L <sub>WT</sub> )	443	8981 021 905	•	•	•	•
	643	8981 021 906	8981 021 910	•	•	•
	843	8981 021 907	8981 021 911	8981 021 914	•	•
	1043	8981 021 908	8981 021 912	8981 021 915	8981 021 917	•
	1243	8981 021 909	8981 021 913	8981 021 916	8981 021 918	8981 021 919

Workpiece Pallets

**Dimensional Data for WT4-S, WT4-S-H**



$B_{WT}$	$L_{WT}$	A	B	C	D	E	F
443	443	81.5	161.5	221.5	81.5	161.5	221.5
443	643	181.5	261.5	321.5	81.5	161.5	221.5
443	843	281.5	361.5	421.5	81.5	161.5	221.5
443	1043	381.5	461.5	521.5	81.5	161.5	221.5
443	1243	481.5	561.5	621.5	81.5	161.5	221.5
643	643	181.5	261.5	321.5	181.5	261.5	321.5
643	843	281.5	361.5	421.5	181.5	261.5	321.5
643	1043	381.5	461.5	521.5	181.5	261.5	321.5
643	1243	481.5	561.5	621.5	181.5	261.5	321.5
843	843	281.5	361.5	421.5	281.5	361.5	421.5
843	1043	381.5	461.5	521.5	281.5	361.5	421.5
843	1243	481.5	561.5	621.5	281.5	361.5	421.5
1043	1043	381.5	461.5	521.5	381.5	461.5	521.5
1043	1243	481.5	561.5	621.5	381.5	461.5	521.5
1243	1243	481.5	561.5	621.5	481.5	561.5	621.5

**WT4-S Workpiece Pallet Weights (in kg)**

12.7 mm fixture plates		Width ( $B_{WT}$ )				
		443	643	843	1043	1243
		weight	weight	weight	weight	weight
Length ( $L_{WT}$ )	443	8.6	•	•	•	•
	643	12.1	17.0	•	•	•
	843	15.7	22.0	28.3	•	•
	1043	19.2	26.9	34.6	42.2	•
	1243	22.8	31.8	40.9	50.0	59.0

**WT4-S-H Workpiece Pallet Weights (in kg)**

19.1 mm fixture plates		Width ( $B_{WT}$ )				
		443	643	843	1043	1243
		weight	weight	weight	weight	weight
Length ( $L_{WT}$ )	443	11.8	•	•	•	•
	643	16.9	24.0	•	•	•
	843	22.0	31.2	40.4	•	•
	1043	27.0	38.3	49.5	60.8	•
	1243	32.2	45.4	58.8	72.0	85.4

NOTE: Dimensions are for reference only. Contact Rexroth for a detailed machining drawing.

Workpiece Pallets

# Workpiece Pallet Frame Kits

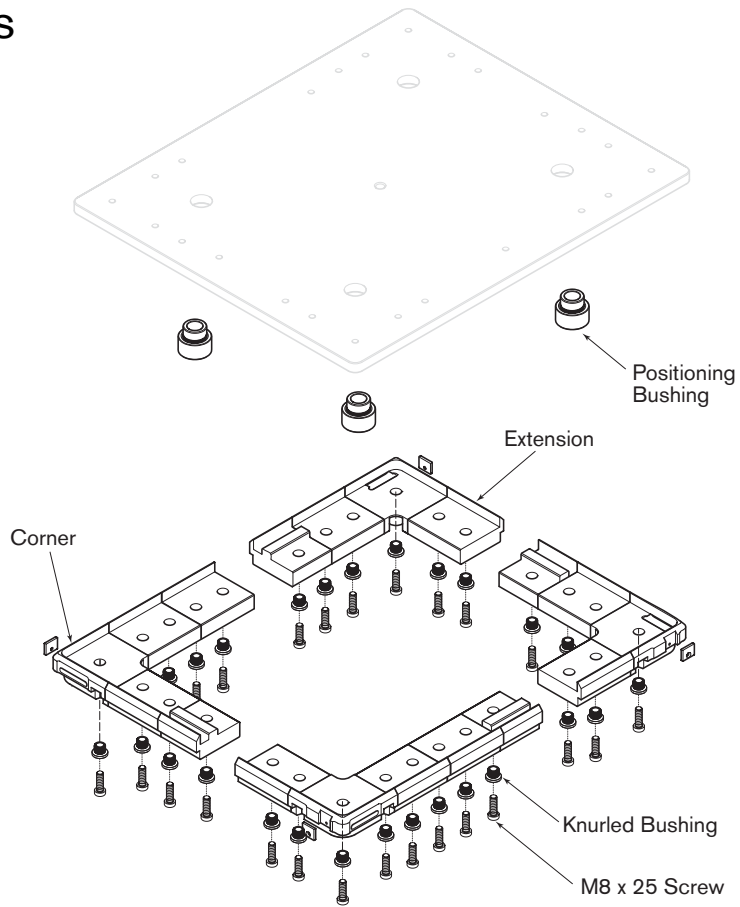
## WT4-S

Workpiece pallet frames can also be purchased as kits for on-site assembly. Ordering pallet frame kits make it possible to perform any machining necessary to the pallet plate for fixturing prior to assembling the pallet. 12.7mm thick aluminum pallet plates are available separately on page 2-6 to 2-7. See page 2-8 to 2-9 for 19.1mm thick aluminum pallet plates

In cases where substantial fixture tooling is being used, it may be possible to eliminate the pallet plate entirely, as well as the cost and weight associated with it.

Each workpiece pallet frame kit includes frame extension modules, corner modules, four positioning knurled bushings, and M8x25 screws that are used to secure a pallet plate (12.7mm or 19.1mm) to the frame extensions and corners.

NOTE: Pallet frame kits **DO NOT** include pallet plates.



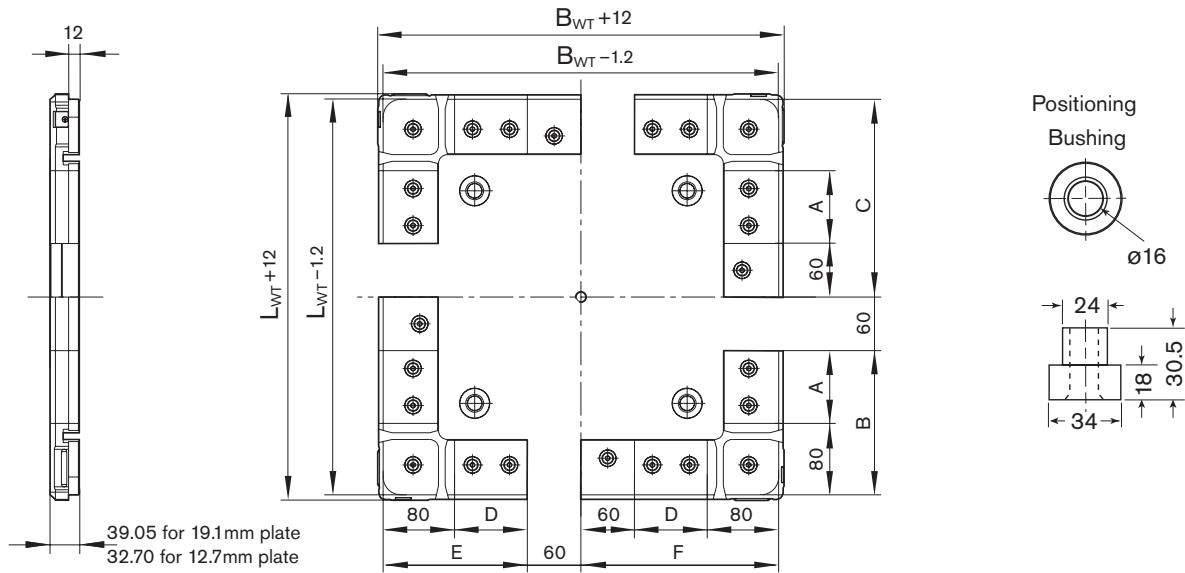
2

### Ordering Information for Workpiece Pallet Frame Kits

		Width (B <sub>wr</sub> )				
		443	643	843	1043	1243
Length (L <sub>wr</sub> )	443	8981 021 920	•	•	•	•
	643	8981 021 921	8981 021 925	•	•	•
	843	8981 021 922	8981 021 926	8981 021 929	•	•
	1043	8981 021 923	8981 021 927	8981 021 930	8981 021 932	•
	1243	8981 021 924	8981 021 928	8981 021 931	8981 021 933	8981 021 934

Workpiece Pallets

Dimensional Data for Pallet Frames



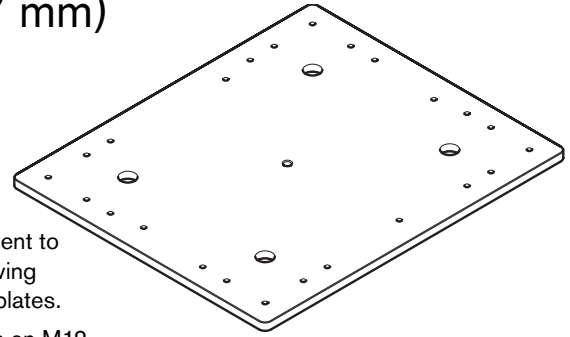
B <sub>WT</sub>	L <sub>WT</sub>		A	B	C	D	E	F
443	443		81.5	161.5	221.5	81.5	161.5	221.5
443	643		181.5	261.5	321.5	81.5	161.5	221.5
443	843		281.5	361.5	421.5	81.5	161.5	221.5
443	1043		381.5	461.5	521.5	81.5	161.5	221.5
443	1243		481.5	561.5	621.5	81.5	161.5	221.5
643	643		181.5	261.5	321.5	181.5	261.5	321.5
643	843		281.5	361.5	421.5	181.5	261.5	321.5
643	1043		381.5	461.5	521.5	181.5	261.5	321.5
643	1243		481.5	561.5	621.5	181.5	261.5	321.5
843	843		281.5	361.5	421.5	281.5	361.5	421.5
843	1043		381.5	461.5	521.5	281.5	361.5	421.5
843	1243		481.5	561.5	621.5	281.5	361.5	421.5
1043	1043		381.5	461.5	521.5	381.5	461.5	521.5
1043	1243		481.5	561.5	621.5	381.5	461.5	521.5
1243	1243		481.5	561.5	621.5	481.5	561.5	621.5

NOTE: Dimensions are for reference only. Contact Rexroth for a detailed machining drawing.

Workpiece Pallets

# Aluminum Workpiece Pallet Plates (12.7 mm)

## Model WT4-S



When pallet plate machining is required for additional fixturing, Rexroth conveniently offers 12.7 mm aluminum pallet plates.

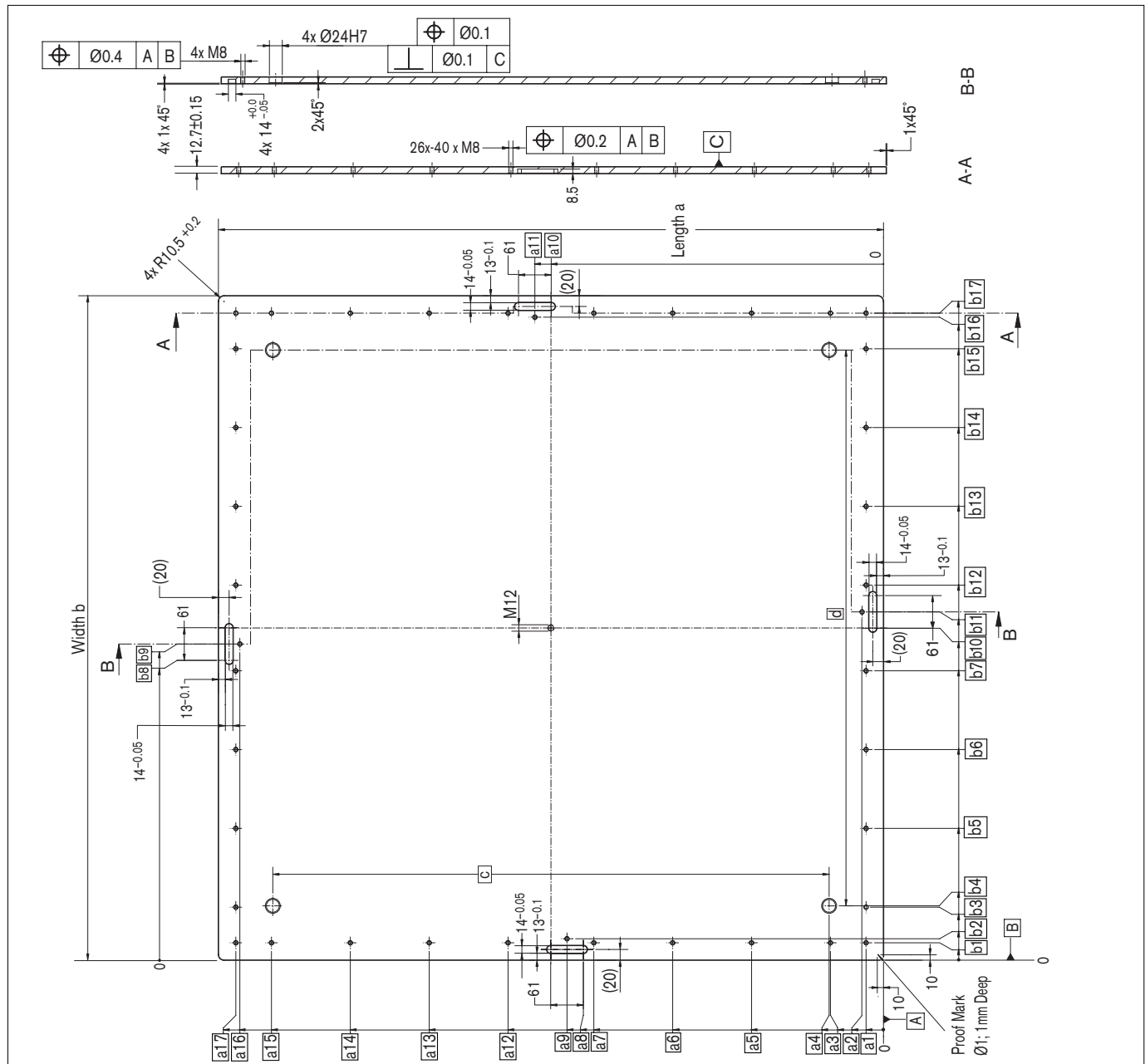
applications engineering department to obtain a detailed pallet plate drawing when machining your own pallet plates.

For best pallet accuracy, the fixture mounting holes and positioning bushing location should be machined at the same time. Please contact the Bosch Rexroth

Each pallet plate is equipped with an M12 tapped hole to accommodate a lifting eye in the center of the plate.

2

### Dimensional Data for 12.7mm Pallet Plates



NOTE: Dimensions are for reference only. Contact Rexroth for a detailed machining drawing.

Workpiece Pallets

**Ordering Information for 12.7 mm Aluminum Workpiece Pallet Plates**

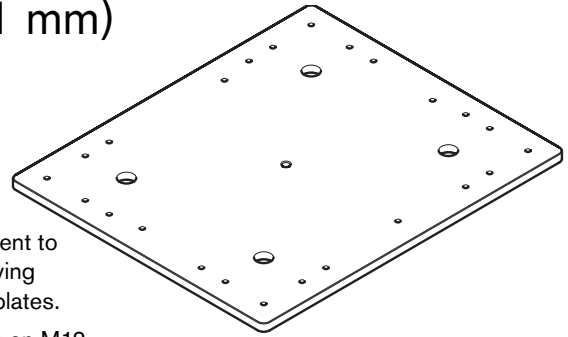
BWT	LWT	Part Number	Flatness	a1	a2	a3	a4	a5	a6	a7	a8	a9	a10	a11	a12	a13	a14	a15	a16	a17
443	443	3842 531 236	0.6	32.5	40	99	101.5			140.5	160	190.5	220	250.5	300.5			342	401	408.5
443	643	3842 531 237	0.8	32.5	40	99	101.5			240.5	260	290.5	320	350.5	400.5			542	601	608.5
443	843	3842 531 239	1	32.5	40	99	101.5	219.75		340.5	360	390.5	420	450.5	500.5	621.5		742	801	808.5
443	1043	3842 531 242	1.2	32.5	40	99	101.5	219.75		440.5	460	490.5	520	550.5	600.5	721.5		942	1001	1008.5
443	1243	3842 531 246	1.2	32.5	40	99	101.5	219.75	393.35	540.5	560	590.5	620	650.5	700.5	847.65	944.85	1142	1201	1208.5
643	643	3842 531 238	0.8	32.5	40	99	101.5			240.5	260	290.5	320	350.5	400.5			542	601	608.5
643	843	3842 531 240	1	32.5	40	99	101.5	219.75		340.5	360	390.5	420	450.5	500.5	621.5		742	801	808.5
643	1043	3842 531 243	1.2	32.5	40	99	101.5	219.75		440.5	460	490.5	520	550.5	600.5	721.5		942	1001	1008.5
643	1243	3842 531 247	1.2	32.5	40	99	101.5	219.75	393.35	540.5	560	590.5	620	650.5	700.5	847.65	944.85	1142	1201	1208.5
843	843	3842 531 241	1	32.5	40	99	101.5	219.75		340.5	360	390.5	420	450.5	500.5	621.5		742	801	808.5
843	1043	3842 531 244	1.2	32.5	40	99	101.5	219.75		440.5	460	490.5	520	550.5	600.5	721.5		942	1001	1008.5
843	1243	3842 531 248	1.2	32.5	40	99	101.5	219.75	393.35	540.5	560	590.5	620	650.5	700.5	847.65	944.85	1142	1201	1208.5
1043	1043	3842 531 245	1.2	32.5	40	99	101.5	219.75		440.5	460	490.5	520	550.5	600.5	721.5		942	1001	1008.5
1043	1243	3842 531 249	1.2	32.5	40	99	101.5	219.75	393.35	540.5	560	590.5	620	650.5	700.5	847.65	944.85	1142	1201	1208.5
1243	1243	3842 531 250	1.2	32.5	40	99	101.5	219.75	393.35	540.5	560	590.5	620	650.5	700.5	847.65	944.85	1142	1201	1208.5

BWT	LWT	b1	b2	b3	b4	b5	b6	b7	b8	b9	b10	b11	b12	b13	b14	b15	b16	b17	c	d
443	443	32.5	40	99	101.5			140.5	160	190.5	220	250.5	300.5			342	401	408.5	238	238
443	643	32.5	40	99	101.5			140.5	160	190.5	220	250.5	300.5			342	401	408.5	438	238
443	843	32.5	40	99	101.5			140.5	160	190.5	220	250.5	300.5			342	401	408.5	638	238
443	1043	32.5	40	99	101.5			140.5	160	190.5	220	250.5	300.5			342	401	408.5	838	238
443	1243	32.5	40	99	101.5			140.5	160	190.5	220	250.5	300.5			342	401	408.5	1038	238
643	643	32.5	40	99	101.5			240.5	260	290.5	320	350.5	400.5			542	601	608.5	438	438
643	843	32.5	40	99	101.5			240.5	260	290.5	320	350.5	400.5			542	601	608.5	638	438
643	1043	32.5	40	99	101.5			240.5	260	290.5	320	350.5	400.5			542	601	608.5	838	438
643	1243	32.5	40	99	101.5			240.5	260	290.5	320	350.5	400.5			542	601	608.5	1038	438
843	843	32.5	40	99	101.5	219.75		340.5	360	390.5	420	450.5	500.5	621.5		742	801	808.5	638	638
843	1043	32.5	40	99	101.5	219.75		340.5	360	390.5	420	450.5	500.5	621.5		742	801	808.5	838	638
843	1243	32.5	40	99	101.5	219.75		340.5	360	390.5	420	450.5	500.5	621.25		742	801	808.5	1038	638
1043	1043	32.5	40	99	101.5	269.75		440.5	460	490.5	520	550.5	600.5	771.25		942	1001	1008.5	838	838
1043	1243	32.5	40	99	101.5	269.75		440.5	460	490.5	520	550.5	600.5	771.25		942	1001	1008.5	1038	838
1243	1243	32.5	40	99	101.5	246.15	393.35	540.5	560	590.5	620	650.5	700.5	847.65	994.85	1142	1201	1208.5	1038	1038

Workpiece Pallets

# Heavy Duty Aluminum Pallet Plates (19.1 mm)

## Model WT4-S-H



When pallet plate machining is required for additional fixturing, Rexroth conveniently offers 19.1mm aluminum pallet plates.

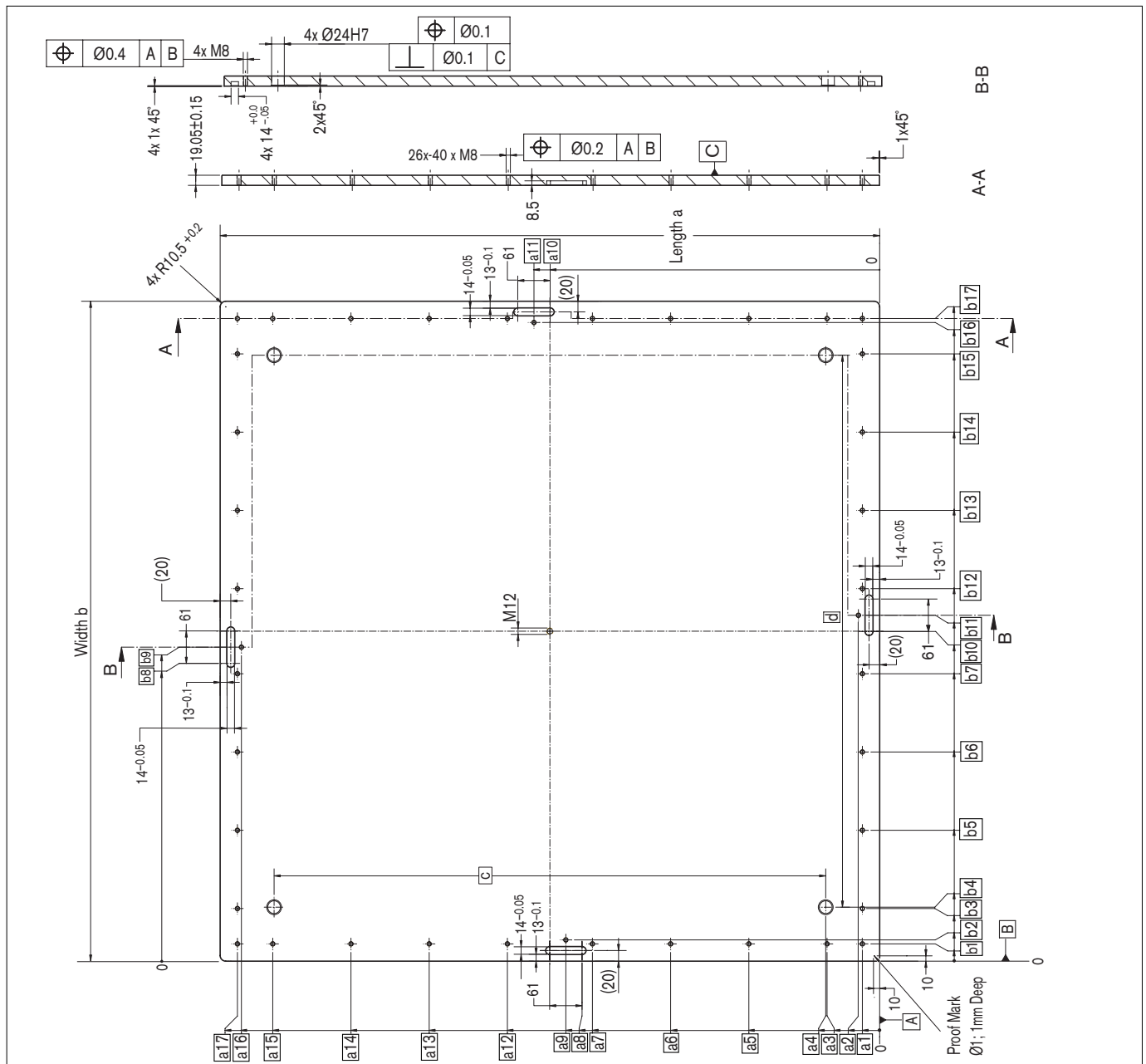
applications engineering department to obtain a detailed pallet plate drawing when machining your own pallet plates.

For best pallet accuracy, the fixture mounting holes and positioning bushing location should be machined at the same time. Please contact the Bosch Rexroth

Each pallet plate is equipped with an M12 tapped hole to accommodate a lifting eye in the center of the plate.

2

### Dimensional Data for 19.1mm Pallet Plates



NOTE: Dimensions are for reference only. Contact Rexroth for a detailed machining drawing.



Workpiece Pallets

**Ordering Information for 19.1 mm Aluminum Workpiece Pallet Plates**

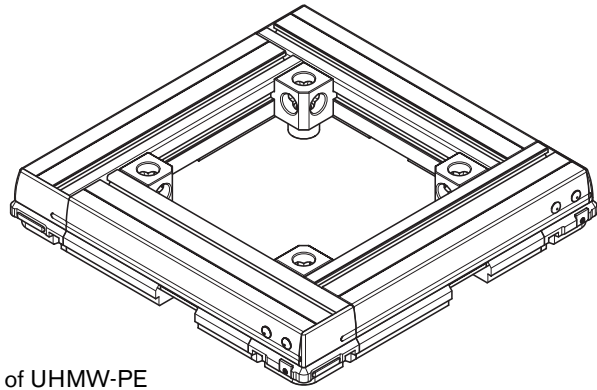
BWT	LWT	Part Number	Flatness	a1	a2	a3	a4	a5	a6	a7	a8	a9	a10	a11	a12	a13	a14	a15	a16	a17
443	443	3842 531 251	0.6	32.5	40	99	101.5			140.5	160	190.5	220	250.5	300.5			342	401	408.5
443	643	3842 531 252	0.8	32.5	40	99	101.5			240.5	260	290.5	320	350.5	400.5			542	601	608.5
443	843	3842 531 254	1	32.5	40	99	101.5	219.75		340.5	360	390.5	420	450.5	500.5	621.5		742	801	808.5
443	1043	3842 531 257	1.2	32.5	40	99	101.5	219.75		440.5	460	490.5	520	550.5	600.5	721.5		942	1001	1008.5
443	1243	3842 531 261	1.2	32.5	40	99	101.5	219.75	393.35	540.5	560	590.5	620	650.5	700.5	847.65	944.85	1142	1201	1208.5
643	643	3842 531 253	0.8	32.5	40	99	101.5			240.5	260	290.5	320	350.5	400.5			542	601	608.5
643	843	3842 531 255	1	32.5	40	99	101.5	219.75		340.5	360	390.5	420	450.5	500.5	621.5		742	801	808.5
643	1043	3842 531 258	1.2	32.5	40	99	101.5	219.75		440.5	460	490.5	520	550.5	600.5	721.5		942	1001	1008.5
643	1243	3842 531 262	1.2	32.5	40	99	101.5	219.75	393.35	540.5	560	590.5	620	650.5	700.5	847.65	944.85	1142	1201	1208.5
843	843	3842 531 256	1	32.5	40	99	101.5	219.75		340.5	360	390.5	420	450.5	500.5	621.5		742	801	808.5
843	1043	3842 531 259	1.2	32.5	40	99	101.5	219.75		440.5	460	490.5	520	550.5	600.5	721.5		942	1001	1008.5
843	1243	3842 531 263	1.2	32.5	40	99	101.5	219.75	393.35	540.5	560	590.5	620	650.5	700.5	847.65	944.85	1142	1201	1208.5
1043	1043	3842 531 260	1.2	32.5	40	99	101.5	219.75		440.5	460	490.5	520	550.5	600.5	721.5		942	1001	1008.5
1043	1243	3842 531 264	1.2	32.5	40	99	101.5	219.75	393.35	540.5	560	590.5	620	650.5	700.5	847.65	944.85	1142	1201	1208.5
1243	1243	3842 531 265	1.2	32.5	40	99	101.5	219.75	393.35	540.5	560	590.5	620	650.5	700.5	847.65	944.85	1142	1201	1208.5

BWT	LWT	b1	b2	b3	b4	b5	b6	b7	b8	b9	b10	b11	b12	b13	b14	b15	b16	b17	c	d
443	443	32.5	40	99	101.5			140.5	160	190.5	220	250.5	300.5			342	401	408.5	238	238
443	643	32.5	40	99	101.5			140.5	160	190.5	220	250.5	300.5			342	401	408.5	438	238
443	843	32.5	40	99	101.5			140.5	160	190.5	220	250.5	300.5			342	401	408.5	638	238
443	1043	32.5	40	99	101.5			140.5	160	190.5	220	250.5	300.5			342	401	408.5	838	238
443	1243	32.5	40	99	101.5			140.5	160	190.5	220	250.5	300.5			342	401	408.5	1038	238
643	643	32.5	40	99	101.5			240.5	260	290.5	320	350.5	400.5			542	601	608.5	438	438
643	843	32.5	40	99	101.5			240.5	260	290.5	320	350.5	400.5			542	601	608.5	638	438
643	1043	32.5	40	99	101.5			240.5	260	290.5	320	350.5	400.5			542	601	608.5	838	438
643	1243	32.5	40	99	101.5			240.5	260	290.5	320	350.5	400.5			542	601	608.5	1038	438
843	843	32.5	40	99	101.5	219.75		340.5	360	390.5	420	450.5	500.5	621.5		742	801	808.5	638	638
843	1043	32.5	40	99	101.5	219.75		340.5	360	390.5	420	450.5	500.5	621.5		742	801	808.5	838	638
843	1243	32.5	40	99	101.5	219.78		340.5	360	390.5	420	450.5	500.5	621.25		742	801	808.5	1038	638
1043	1043	32.5	40	99	101.5	269.75		440.5	460	490.5	520	550.5	600.5	771.25		942	1001	1008.5	838	838
1043	1243	32.5	40	99	101.5	269.75		440.5	460	490.5	520	550.5	600.5	771.25		942	1001	1008.5	1038	838
1243	1243	32.5	40	99	101.5	246.15	393.35	540.5	560	590.5	620	650.5	700.5	847.65	994.85	1142	1201	1208.5	1038	1038

Workpiece Pallets

# Assembled Open Center Pallets

## Model WT4-S/F



An alternative to the assembled workpiece pallet is the assembled open center pallet. This pallet includes an aluminum profile frame, frame extension modules, corner modules and end caps.

The open center pallet is very lightweight in design and allows a greater portion of total pallet payload (pallet, fixture and product) to be applied to the fixturing and product.

The aluminum profile frame includes a 10mm T-slot, which allows for simple fastening of product supports or fixturing.

The wear strips are made of UHMW-PE and include an integrated dampening element to absorb the shock when two pallets come into contact with each other.

NOTE: Positioning bushings are not included and are only required when the pallet is used in conjunction with a lift position unit. Four positioning bushings are required per pallet and they are sold in kits of two.

### Ordering Information for Assembled Frame Style Pallets WT4-S/F

		Width (B <sub>WT</sub> )				
		443	643	843	1043	1243
Length (L <sub>WT</sub> )	443	8981 021 935	•	•	•	•
	643	8981 021 936	8981 021 940	•	•	•
	843	8981 021 937	8981 021 941	8981 021 944	•	•
	1043	8981 021 938	8981 021 942	8981 021 945	8981 021 947	•
	1243	8981 021 939	8981 021 943	8981 021 946	8981 021 948	8981 021 949

### Assembled Frame Style Weights (in kg)

		Width (B <sub>WT</sub> )				
		443	643	843	1043	1243
Length (L <sub>WT</sub> )	443	8.3	•	•	•	•
	643	10.6	12.8	•	•	•
	843	12.8	15.1	17.4	•	•
	1043	15.1	17.4	19.7	22.0	•
	1243	17.4	19.7	22.0	24.3	26.6

NOTE: 4 positioning bushings increase the total pallet weight by 2.6 kg.

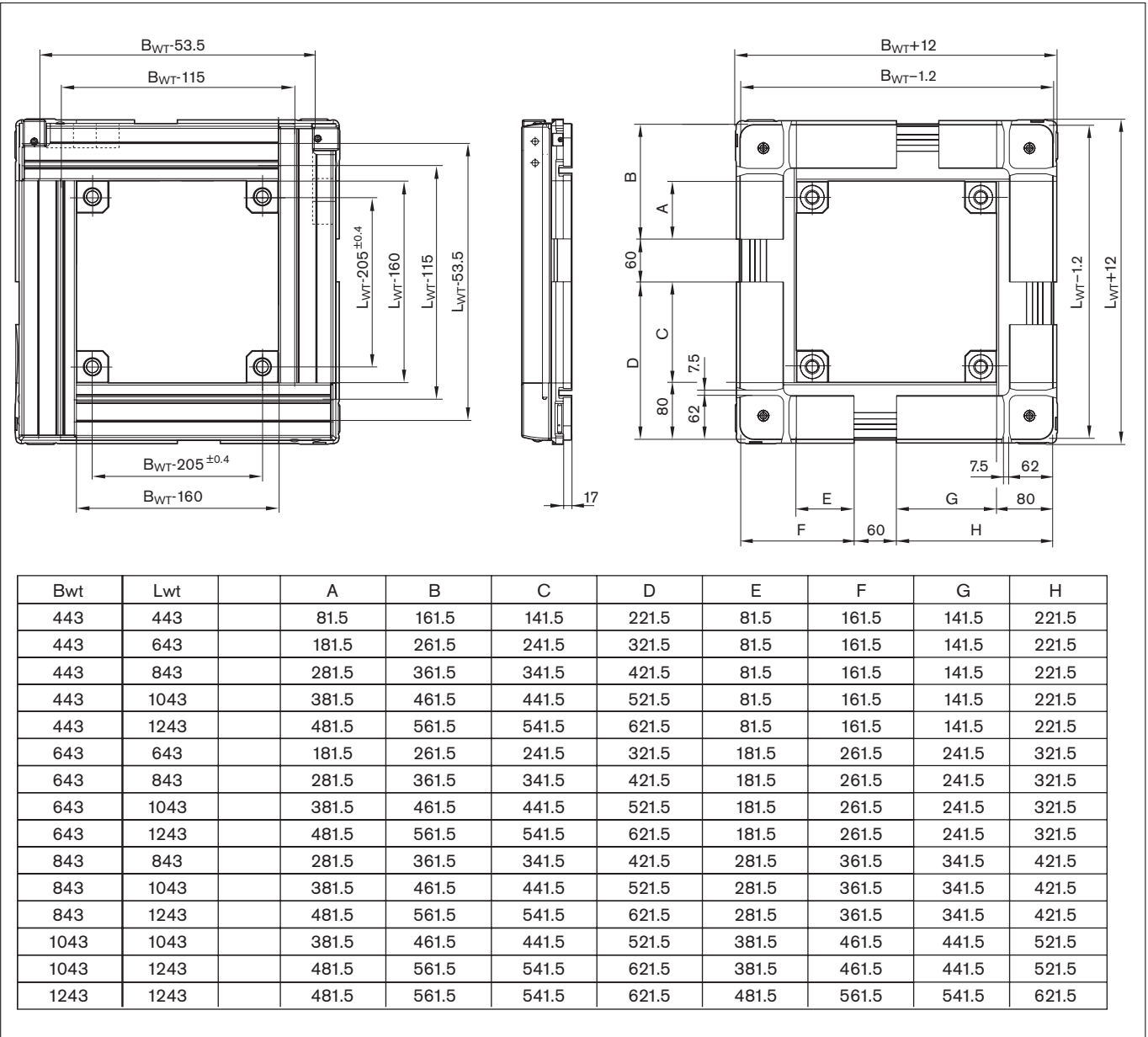
### Ordering Information-Positioning Bushings

Description	Part Number
Positioning Bushing Kit (Qty. 2)	3842 530 529

NOTE: 4 bushings are required per pallet. Order 2 kits per pallet.

Workpiece Pallets

**Dimensional Data for WT4-S/F**



NOTE: Dimensions are for reference only. Contact Rexroth for a detailed machining drawing.