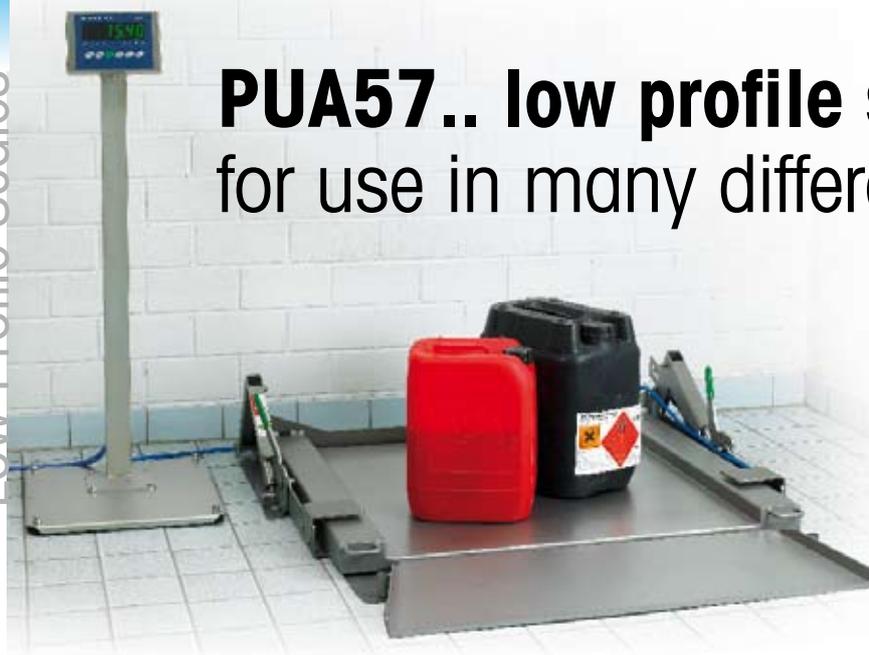# PUA57.. low profile scale –
for use in many different industries

■ Fields of application
– Incoming and outgoing goods
– Production
– Commissioning

■ Areas of application
– Wet or dry
– Safe area
– Hazardous zone, categories 2 & 3

■ Weighing range
From 300 – 1500 kg

■ Certifiable resolution
Singe range scale – Multi-range scale – Multi-interval

■ Scale interface
Analog – Digital (IDNet)

■ Solutions to suit your needs
– Approach ramps
– Lifting device
– Free size scales
– Installation frame
– Screw-on passage stop

You determine the field of application

Is a conventional pit frame scale not an option? Is a simple and thorough cleaning system indispensable?

The PUA57.. range of low profile scales by METTLER TOLEDO offer versatile solutions for your varied applications. Available in two standard sizes and three free size ranges. The maximum weighing capacity of the scale can be 300kg, 600kg or 1500kg.
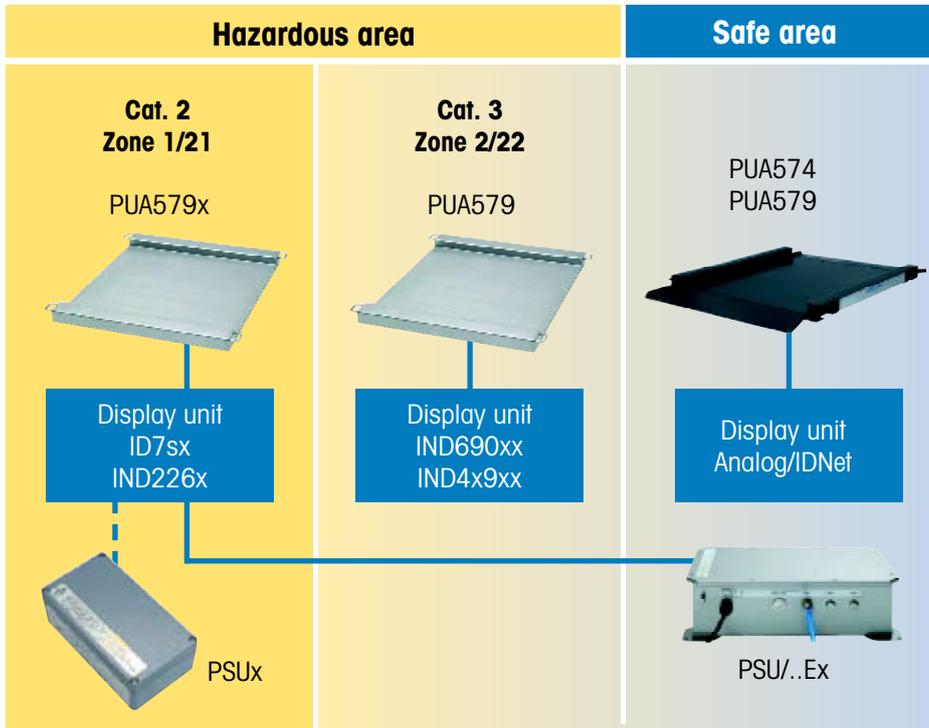
The through passage of only 35 mm and the short approach ramp make it easy to drive over the scales. Weighing samples on transport vehicles, mobile mixing containers or vessels can therefore be quickly and easily placed onto the scales. In addition, the robust ramps can be supplied for both short sides of the scale.

For use in damp rooms or areas with especially aggressive ambient conditions, the PUA579(x) line models are manufactured using high-quality chrome-nickel steel (AISI 304). The individual weighing platforms are also available in acid-proof chrome-nickel-molybdenum steel (AISI 316) or with a beveled surface.

The strict hygiene requirements of the Chemical/Pharmaceutical and Food industries can be very easily fulfilled using the lifting device for the PUA579(x) line. Special gas filled springs ensure that the equipment is easy to use without causing personal physical strain. In narrow areas or areas that are difficult to access, simply fold away the scale when it is being cleaned or after it has been used! Approach ramps which can be fitted with ease are never a hindrance when it comes to cleaning the scale properly.

Max. capacity	1 x 6000e SR	2 x 3000e MR/MI		3 x 3000e MR		
kg	kg/kg	kg/kg		kg/kg		
		Range 1	Range 2	Range 1	Range 2	Range 3
300	0.05/300	0.05/150	0.1/300	–	–	–
600	0.1/600	0.1/300	0.2/600	–	–	–
1500	0.2/1200	0.2/600	0.5/1500	0.1/300	0.2/600	0.5/1500

SR SingleRange, **MR** MultiRange, **MI** MultiInterval

Hazardous area		Safe area
Cat. 2 **Zone 1/21** PUA579x	**Cat. 3** **Zone 2/22** PUA579	 PUA574 PUA579
Display unit ID7sx IND226x	Display unit IND690xx IND4x9xx	Display unit Analog/IDNet
PSUx		PSU/..Ex

Installation in hazardous areas

Is your weighing system installed in accordance with the explosion protection guidelines? We can offer you complete solutions for Categories 2 and 3.

Stainless steel PUA579 line models can be installed without additional expenditure in both safe areas and hazardous environments for Category 3. When used in conjunction with the intrinsically safe ID7sx display unit and the PSU/…Ex power supply unit, PUA579x low profile scales are the optimum equipment for use in Zones 1 (Gas) and 21 (Dust) of Category 2.

Enameled models from the PUA574 line on the other hand are only designed for use in a safe area.

The resolution is everything

Singe Range scale – Multi-Range scale – Multi-Interval scale – Select the optimum resolution for your weighing process. If the standard resolution of 1x3000 certifiable points is insufficient, all models can be supplied with 1x6000e or 2x3000e Multi-Range / Multi-Interval. The 3x3000e Multi-Range scale is also available for a weighing capacity of 1500 kg. In addition, the optional IDNet scale interface and a powerful analog/digital converter provide a noncertifiable readability of 30.000d.

The optimum weighing system with a suitable display unit

The weighing process determines which display unit you select. A wide range of display units are available with a digital or analog balance interface. In addition to the straightforward weighing function, the display units can be configured individually depending on your application:

- Available data interfaces:
  CL, RS232, RS485, Ethernet, Profibus
- Additional software modules for formulations, dosing, totaling, counting, etc.
- Peripheral devices such as printer, external keyboard, etc.

Analog or digital balance interface – a matter of philosophy

Minimize the installation times, increase your flexibility and make the most of the advantages of a digital IDNet scale interface. Simply connect and away you go! Up to 4 weighing platforms can be connected to the IND690 display unit and configured in any way – even for legal applications.

The powerful analog/digital converter for digital weighing platforms guarantees precise and stable measurement values. The quick equilibration behavior and update rate of up to 20 measurement values/sec also speak for themselves.

PUA579 with two approach ramps

PUA574 with approach ramps and IND439 display unit

Options and accessories – it must be right for you

The PUA57.. line of low profile scales enhances its flexible characteristics with a large number of product options and wide range of accessories.

- High-resolution measuring cells provide a certifiable resolution of 6000e SR, 2x3000e MR/MI or 3x3000eMR.
- Plug'n weigh - the digital balance interface offers reliable and easy setup and integration into existing weighing systems.
- The acid-resistant chrome-nickel-molybdenum steel structure (AISI316) of the PUA579(x) line meets the most demanding requirements for corrosion resistance.
- If a particularly smooth surface is required, we can offer an average peak-to-valley height < 1µm for all stainless steel variants on request.
- Setting up the PUA57 low profile scale is child's play with the installation frame. Just mount and align the installation frame, position the scale inside it, align it - and you're done. The approach ramps are easy to connect. Thanks to the non-slip rubber coating on the base, they can be floor-mounted without fixings for non-legal applications, while for legal applications they can also be secured with floor pins.
- Also available are a retrofittable passage stop (NB: not for use in conjunction with the hoisting system) and a wide range of cable lengths.
- The material and surface finish of the plug-in approach ramps can be customized to match the PUA579(x) low profile scale.

Quick integration provided by custom-tailored solutions

The 3 free size scale dimensions ensure that the weighing system is quickly integrated into your production process. Let us know the length you require and the desired passage width and we will produce a custom-tailored solution for you. Of course we can also supply appropriate approach ramps, installation frames and lifting device[1] for your particular application.
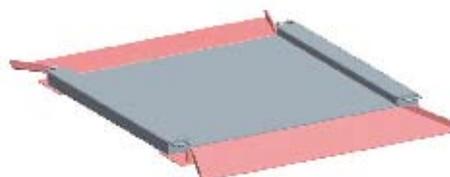
Customer-specific scales

Are you still unable to find a suitable solution for your specific application in spite of our wide range of products? Please contact us and together we will try to find the best possible solution for you.
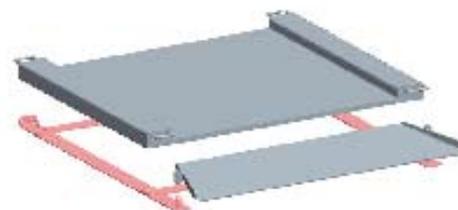
[1] Lifting device only suitable for PUA579(x) with passage width 850, 1000 or 1250 mm.
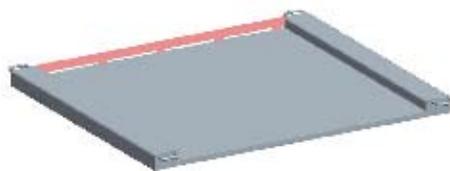

Lifting device accessory

Two-way approach ramp accessory

Installation frame accessory

Passage stop option

Base model		CS	E	FL	FM	FH
Dimensions (A x B) mm		850 x 850	1500 x 1250	from 750 x 400 to 1250 x 1000	from 1000 x 1000 to 1500 x 1250	from 1500 x 1250 to 1500 x 1500
Height			**35 mm**			**45 mm**
Load capacity	300 kg	•	•	•	•	–
	600 kg	•	•	•	•	–
	1500 kg	–	•	–	•	•
Options						
IDNet interface		•	•	•	•	•
Passage stop		•	•	•	•	•
Resolution	1 x 3000e	Standard				
	2 x 3000e MR	•	•	•	•	•
	2 x 3000e MI	•	•	•	•	•
	1 x 6000e	•	•	•	•	•
	3 x 3000e MR*	–	•	–	•	•
Cable length	5m	Standard				
	10 m	•	•	•	•	•
	20 m**	•	•	•	•	•
Chrome-nickel steel structures						
Material of weighing platform	V2A	Standard				
	V4A	•	•	•	•	•
Surface of weighing platform	Ra<1µm	•	•	•	•	•

* 3 x 3000e MR only possible for load capacity of 1500 kg, ** not for PUA579x

Uncomplicated cleaning thanks to open design

Technology and quality make all the difference

The easy-to-clean construction of the CS and FL scale size, the open design of the lifting device and the approach ramps all comply with the EHEDG (European Hygienic Engineering Design Group) guidelines and are therefore ideal for use in particularly critical areas of the food industry.

As well as making the equipment easy to clean, we also make sure that it is easy and safe to handle and that the entire PUA579 low profile scale can be raised and lowered with minimal effort. We have your safety in mind.

Contamination and corrosion have no chance thanks to the high-quality material and smooth surfaces. The chrome-nickel steel low profile scales are therefore predestined for the HACCP (Hazard Analysis Critical Control Point) and GMP (Good Manufacturing Practice) requirements of fair work.

IP68
GMP
HACCP
EHEDG

		EHEDG conform.	GMP
	– CS	X	X
	– E		
PUA579 (X)	– FL	X	X
	– FM		
	– FH		
Lifting	850 mm	X	X
device*	1000 mm	X	X
	1250 mm	X	X
Approach ramps for PUA579 (X)		X	X
Sealing kit**		X	
Installation frame		X	

* Lifting device only suitable for PUA579(x) with passage width 850, 1000 or 1250 mm.
** Required for EHEDG compliance

			PUA-CS/-FL		PUA-E/-FM			PUA-FH
Max. capacity		kg	300	600	300	600	1500	1500
Readability/Max. load (e1/Max1)		kg	0.1/300	0.2/600	0.1/300	0.2/600	0.5/1500	0.5/1500
Min. load		kg	2	4	2	4	10	10
Zero setting range		kg	+/- 6	+/- 12	+/- 6	+/- 12	+/- 30	+/- 30
Preload range		kg	-6...+54	-12...+108	-6...+54	-12...+108	-30...+270	-30...+270
Taring range (subtractive)		kg	from 0 to max. capacity					
Preload range		kg	420	120	300	1150	250	1000
Measuring principles			Strain gauge technology with analog/digital signal output					
Max. static safe load	Central	kg	800	800	1750	1750	1750	3000
	Side	kg	400	400	900	900	900	1800
	Corner	kg	300	300	450	450	450	900
	Wheel load	kg	200	200	400	400	400	800
Weighing accuracy								
Repeatability (s)	1 x 3000e	kg	0.04	0.06	0.04	0.06	0.15	0.15
	1 x 6000e SR	kg	0.02	0.03	0.02	0.03	0.07	0.07
	2 x 3000e MI	kg	0.02	0.03	0.02	0.03	0.07	0.07
	3 x 3000e MR	kg	0.02	0.03	0.02	0.03	0.07	0.07
Linearity (typical)	1 x 3000e	kg	0.05	0.1	0.05	0.1	0.2	0.2
	1 x 6000e SR	kg	0.03	0.05	0.03	0.05	0.1	0.1
	2 x 3000e MI	kg	0,03	0.05	0.03	0.05	0.1	0.1
	3 x 3000e MR	kg	0.03	0.05	0.03	0.05	0.1	0.1
Length of connection cable		m	5					
PUA579 Protection (chrome-nickel steel)			IP68					
PUA574 Protection (enameled)			IP65					

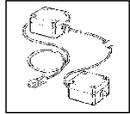All low profile scales comply with OIML accuracy class III, permissible for a temperature range of -10 … +40°C.

■ Accessories

Connection cable extension*
10 m long, connectable on both sides, used for the remote setup of terminals.
Order No. 00 504 134

Connection set*
for the continuous extension of the connection cable to 100 m, comprises two junction boxes. Connection cable on terminal side of box, 2. 5 m long
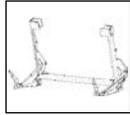Order No. 00 504 133

Special cable off the roll*
100 m, used with the connection set for a continuous extension of the connection cable
Order No. 00 504 177

* only used with digital IDNet balance interface

Lifting device for PUA579 (stainless steel AISI304)
Weighing platform not included, available for the following models (length A x passage width B):
850…1250 x **850** mm	Order No. 22 015 715
850…1500 x **1000** mm	22 015 718
1100…1500 x **1250** mm	22 015 719

Installation frame (stainless steel AISI316)
Size CS, for 1 ramp	22 017 751
Size E, for 1 ramp	22 017 752
Size F, for 1 ramp	22 017 753
Size CS, for 2 ramps	22 017 759
Size E, for 2 ramps	22 017 760
Size F, for 2 ramps	22 017 761
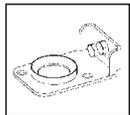
Foot plate set with stop
2-piece set, only for use with one ramp..
– Enameled	22 012 783
– Chrome-nickel steel (AISI304)	22 012 778
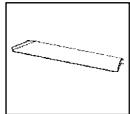
Approach ramps for PUA579 (stainl. steel AISI304)
Size CS	22 012 779
Size E	22 012 780
Size FL/FM	22 012 781
Size FH	22 012 782

Approach ramps for PUA574 (enameled)
Size CS	22 012 784
Size E	22 012 785
Size FL/FM	22 012 786
Size FH	22 012 787

Passage stop
Retrofittable (not for use in conjunction with hoisting system)
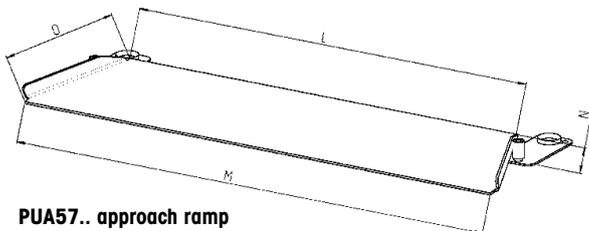|	
– Stainless steel AISI304, for PUA579	22 014 208
– Enameled, for PUA574	22 014 206
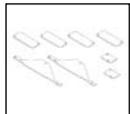
Sealing kit
Rubber sealing sheets for floor-mounted installation: sufficient for 2x ramps, 1x foot plate set or 1x hoisting system. Includes 12x special pins 22 006 354

PUA57.. approach ramp
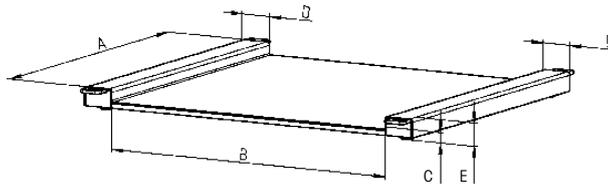
■ PUA57.. dimensions

Standard sizes (mm)

Weighing platform	CS	E	FL	FM	FH
Length A	850	1500	750-1250	1000-1500	1500
Passage width B	850	1250	400-1000	1000-1250	1250-1500
C	35	35	35	35	45
D	100	100	100	100	100
E PUA574	72	115	72	115	115
E PUA579	72	72	72	72	72
F	737	1387	A-113	A-113	A-113
G	950	1350	B+100	B+100	B+100
H	40	40	40	40	40

Hoisting system					
I	850		1000		1250
K	900		900		1150

Approach ramps					
L	850	1250	B	B	B
M	1020	1420	B+170	B+170	B+170
N	35	35	35	35	45
O	300	300	300	300	500

PUA574/579 dimensions
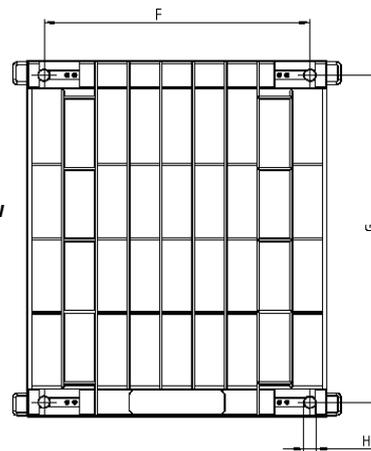
PUA579-CS / FL dimensions, view from bottom
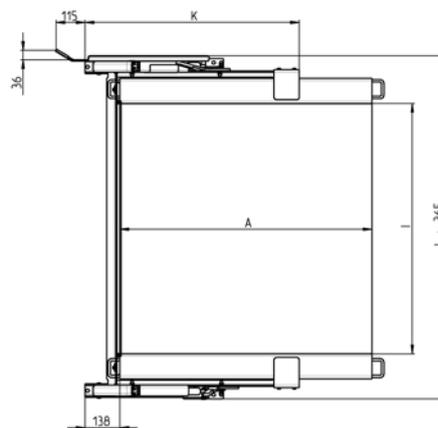
PUA579-CS/FL/FM dimensions with lifting system

| **Conformity**	CE OIML
Quality certificates	
Worldwide service	ServiceXXL Tailored Services

Low Profile Scales

PUA57.. low profile scales

For all weighing applications, where the mobility of the scale and the lowest passage height is an absolute must:

- Various capacities
- Different resolutions
- Custom-tailored solutions
- Numerous options & wide range of accessories

EX
GMP
EHEDG
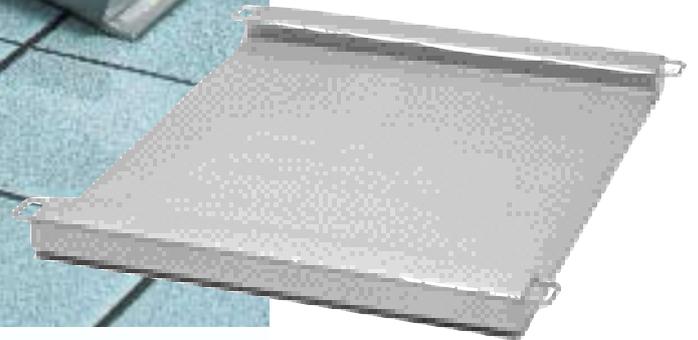
For effective cleaning and mobility
with no pit model

METTLER TOLEDO