

# LWHP18 COMPRESSION LOAD WASHER (U.S. & METRIC)

## FEATURES & BENEFITS

- Capacities from 5 to 5,000kN (1.12K to 1124K lbf)
- IP67 environmental protection
- Stainless steel construction

## SPECIFICATIONS

ACCURACY – (MAX ERROR)			
Capacities	Metric	5 to 200kN	500 to 5000kN
	U.S.	1.12 to 45K lbf	112 to 1.12K lbf
Nonlinearity – %FS		±0.5	
Hysteresis – %FS		±0.5	
Nonrepeatability – %RO		±0.1	
Creep, in 30 min – %		±0.1	
TEMPERATURE			
Effect on Zero – %RO / deg	°C	±0.01	
Effect on Output – % / deg	°C	±0.01	
Compensated Range	°C	-10 to +70	
	°F	+14 to +158	
Operating Range	°C	-30 to +80	
	°F	-22 to +176	
ELECTRICAL			
Output – mV/V		1 ±20%	
Excitation Voltage – VDC		2 - 12	
Bridge Resistance – Ohm		350	
Electrical Connection – Cable	m	3	Connector – Binder581
	ft	9.8	
MECHANICAL			
Safe Overload – %RO		150	
Deflection at Rated Capacity – mm		< 0.1	
IP Rating		IP67	
Material		Stainless steel	

## OPTIONS

- Special temperature range
- Internal shunt resistor – 100% output
- Standardized output
- Add connector to cable
- Custom calibration
- Transducer Electronic Data Sheet (TEDS)
- Cable length
- 100% control signal (internal shunt cal)

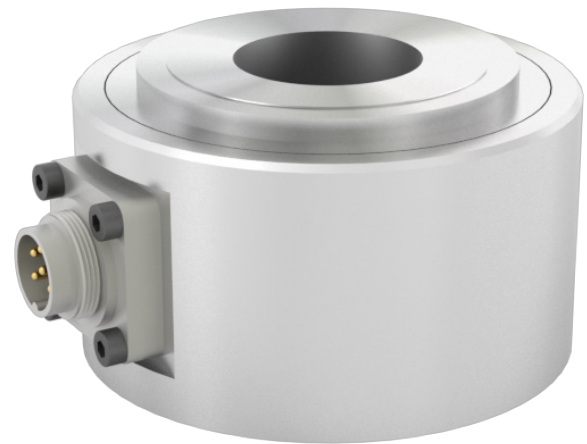
## ACCESSORIES

- Instrumentation

## STANDARD CONFIGURATION

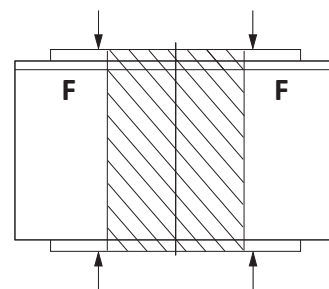


Model LWHP18 5 kN (Shown)



Model LWHP18 500 - 5000 kN (Shown)

## LOADING DIAGRAM

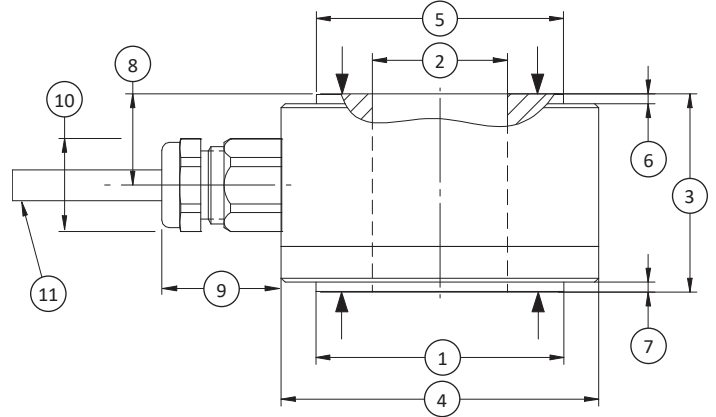
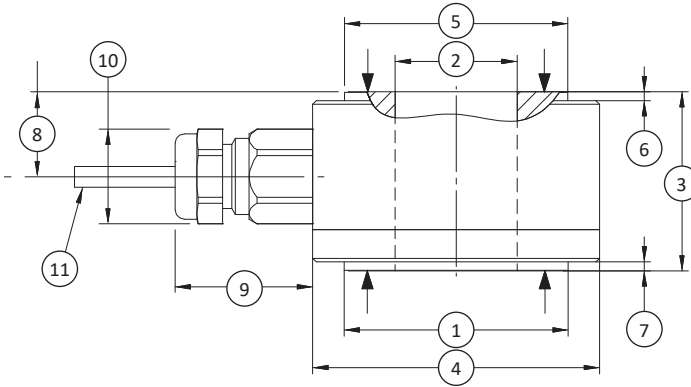


## CONNECTOR OPTIONS

- 3 m (10 ft) integral cable
- Series 723 binder (5 to 5000 kN or 112 to 1124K lbf)

U.S. dimensions and capacities are provided for conversion only. Standard products have International System of Units (SI) capacities and dimensions.

# LWHP18 COMPRESSION LOAD WASHER (U.S. & METRIC)



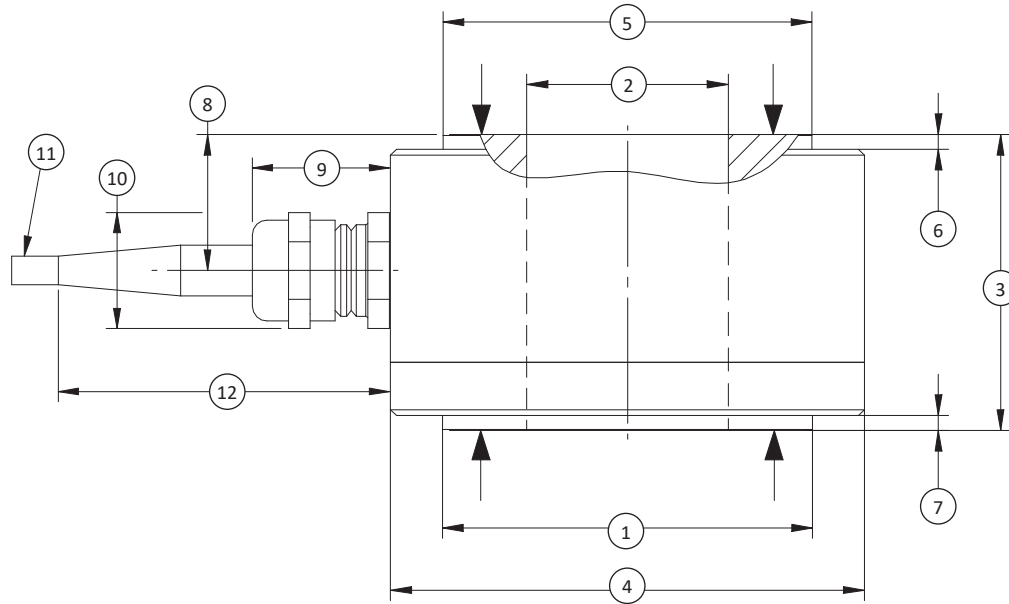
## DIMENSIONS

See Drawing	CAPACITY	
	Metric (kN)	U.S. (lbf)
	5	1.12K
	mm	in
(1)	∅10	∅0.4
(2)	∅5	∅0.2
(3)	30	1.2
(4)	∅30	∅1.2
(5)	∅10	∅0.4
(6)	2	0.1
(7)	2	0.1
(8)	15	0.6
(9)	14.5	0.57
(10)	∅10	∅0.394
(11)	∅3.2	∅0.13

## DIMENSIONS

See Drawing	CAPACITY					
	Metric (kN)	U.S. (lbf)	Metric (kN)	U.S. (lbf)	Metric (kN)	U.S. (lbf)
	10	2.25K	20	4.5K	50	11.2K
	mm	in	mm	in	mm	in
(1)	∅14	∅0.6	∅22	∅0.9	∅28	∅1.1
(2)	∅8	∅0.3	∅15	∅0.6	∅15	∅0.6
(3)	30	1.2	30	1.2	30	1.2
(4)	∅30	∅1.2	∅40	∅1.6	∅40	∅1.6
(5)	∅14	∅0.6	∅22	∅0.9	∅28	∅1.1
(6)	2	0.1	2	0.1	2	0.1
(7)	2	0.1	2	0.1	2	0.1
(8)	15	0.6	15	0.6	15	0.6
(9)	15.5	0.61	15.5	0.61	15.5	0.61
(10)	∅12	∅0.47	∅12	∅0.47	∅12	∅0.47
(11)	∅4.6	∅0.18	∅4.6	∅0.18	∅4.6	∅0.18

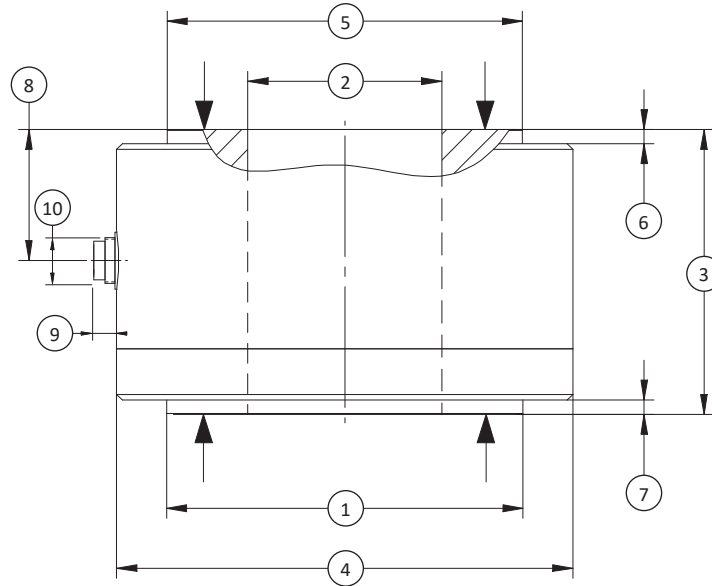
# LWHP18 COMPRESSION LOAD WASHER (U.S. & METRIC)



## DIMENSIONS

See Drawing	CAPACITY			
	Metric (kN)	U.S. (lbf)	Metric (kN)	U.S. (lbf)
	mm	in	mm	in
(1)	Ø35	Ø1.4	Ø47.5	Ø1.9
(2)	Ø20	Ø0.8	Ø25	Ø1.0
(3)	40	1.6	40	1.6
(4)	Ø55	Ø2.2	Ø64	Ø2.5
(5)	Ø35	Ø1.4	Ø48	Ø1.9
(6)	2	0.1	2.5	0.1
(7)	2	0.1	2.5	0.1
(8)	20	0.8	20	0.8
(9)	19	0.75	19	0.75
(10)	Ø16.5	Ø0.65	Ø16.5	Ø0.65
(11)	Ø4.6	Ø0.18	Ø4.6	Ø0.18
(12)	46	1.8	46	1.8

# LWHP18 COMPRESSION LOAD WASHER (U.S. & METRIC)



## DIMENSIONS

See Drawing	CAPACITY									
	Metric (kN)	U.S. (lbf)	Metric (kN)	U.S. (lbf)	Metric (kN)	U.S. (lbf)	Metric (kN)	U.S. (lbf)	Metric (kN)	U.S. (lbf)
	500	112K	1000	225K	2000	450K	3000	674K	5000	1124K
	mm	in	mm	in	mm	in	mm	in	mm	in
(1)	Ø60	Ø2.4	Ø88	Ø3.5	Ø105.6	Ø4.2	Ø125	Ø4.9	Ø220	Ø8.7
(2)	Ø30	Ø1.2	Ø68	Ø2.8	Ø68	Ø2.8	Ø68	Ø2.8	Ø100	Ø3.9
(3)	50	20	100	3.9	100	3.9	100	3.9	120	4.7
(4)	Ø80	Ø3.1	Ø129	Ø5.1	Ø160	Ø6.3	Ø160	Ø6.3	Ø270	Ø10.6
(5)	Ø60	Ø2.4	Ø88	Ø3.5	Ø106	Ø4.2	Ø124.6	Ø4.9	Ø220	Ø8.7
(6)	4	0.2	4	0.2	5	0.2	5	0.2	5	0.2
(7)	3	0.1	5	0.2	5	0.2	5	0.2	5	0.2
(8)	26	1.0	46.5	1.8	46	1.8	47	1.9	60	2.4
(9)	Ø20	Ø0.79	Ø20	Ø0.79	Ø20	Ø0.79	Ø20	Ø0.79	Ø20	Ø0.79
(10)	12.5	0.49	12.5	0.49	12.5	0.49	12.5	0.49	12.5	0.49



www.alavaingenieros.com | alava@grupopalava.com