

# Binotto

THE TIPPING POWER

- Underbody tipping hoists
- Front-mount tipping hoists
- Well-mount tipping hoists

**B3**  
TECHNOLOGY

 **TES** TRANSPORT  
ENGINEERING SOLUTIONS

OUR COMMITMENT - YOUR SUCCESS



# THE TIPPING POWER

Front-mount hoists

Well-mount hoists

Underbody hoists

# Binotto

THE TIPPING POWER



## The Binotto Group

Based in Italy, Binotto is a global leader in the design, manufacture and distribution of tipping hoists. It is undoubtedly the only company in Europe to design and produce such a vast quantity and variety of hoist models, with the widest range of capacity and product variations.

- Established for over 60 years
- Operating in more than 150 countries worldwide through its own subsidiaries, authorised dealers and service outlets.
- 5 state-of-the-art manufacturing plants with high-technology, robotised production-lines.
- 50,000 square metres of production area
- Capacity to produce more than 150,000 hoists per year.







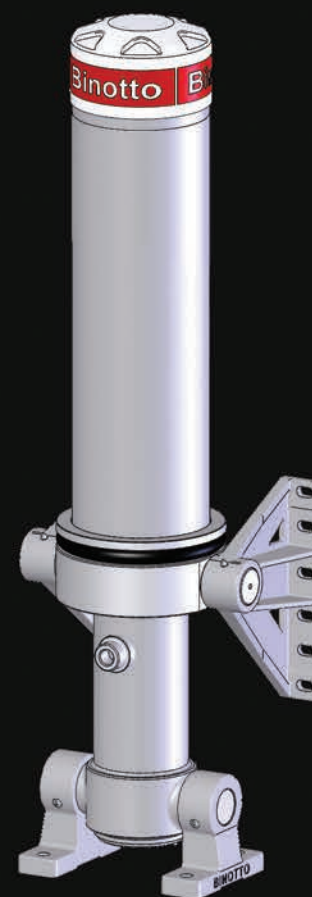
# Binotto

THE TIPPING POWER

## Binotto Cylinders

Binotto designs, manufactures and distributes a complete range of hoists for all tipping applications.

- Underbody, front-mount and well-mount configurations.
- 2 to 100 tonne capacity
- 3-way tipper options
- Rear-tipping and side-tipping applications



## Binotto Construction

The key features and superior seal and wiper system of Binotto hoists, ensure they operate and are proven in the most extreme environments, from Siberian steppes to Saudi deserts.

- Only high-quality steel producers are accepted as Binotto strategic suppliers (such as Dalmine and Mannesmann)
- All stages and outer tubes are manufactured exclusively from seamless steel-tube with a high yield-point ( $RS \geq 48 \text{ kg/mm}^2$ ) and high tensile strength ( $R \geq 65 \text{ kg/mm}^2$ )
- Binotto stages are roll-hardened for exceptional smoothness. This feature, along with the use of special bushes, ensures a clearance of no more than 0.07mm between stages is achieved – a vital aspect in resisting side-loads and bending factors.
- The internal and external “rolling” burnishing process for all stages and outer tubes, increases seal performance and life, resulting in more reliable and long-lasting products.
- A solid-stage design and absence of stop-limiting rings is an unsurpassed solution. Binotto’s design, with stop-contact faces machined directly from solid tube, without welds, provides maximum safety and service life. (B3 models)



# THE TIPPING POWER

Front-mount hoists  
Well-mount hoists  
Underbody hoists



## Binotto Quality

Binotto operates under the highest International Quality Standard (ISO 9001). This gives the group the ability to combine state-of-the-art plant automation with the expertise of its staff.

- Controlled and documented processes and procedures
- Continual process optimisation
- Skilled and dynamic staff
- Spirit of initiative and continuous research
- Company culture targeted at quality
- Dedicated and proficient customer service





# B3

## TECHNOLOGY

## Introducing B3 Cushioning System

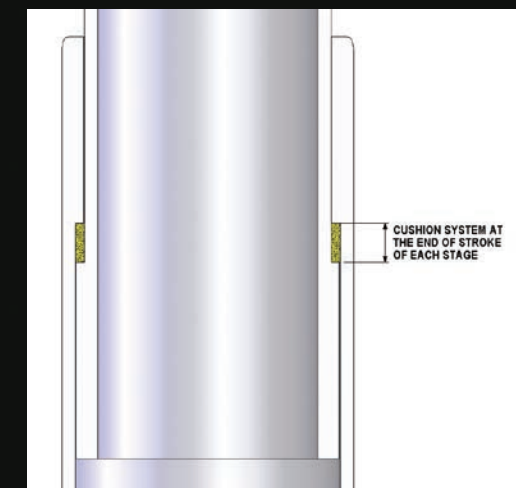
**B3** is a new hoist

**B3** sets a new benchmark in tipping hoist performance

**B3** is stability, safety, durability



Hydraulic cushioning is a well-known and utilised technology in many broader, cylinder applications. Now, Binotto brings the benefits of this technology to the tipping market. A clever and unique design provides a momentary 'cushion' effect at the end of the stroke of each stage. This revolutionary feature, along with special seals and wipers, provides numerous benefits to operator and hoist alike.



**B3 technology controls the flow of oil at the end of the stroke of each stage, to 'cushion' the stage transition.**



### A new era in tipping hoists has arrived

- Up to 20% faster tipping cycle compared to non-B3 hoists of the same diameter
- Less noise, friction and vibration
- Longer seal and wiper lifespan
- Greater hoist protection and service life
- Greater safety at end-of-stroke, even at high speed
- Greater vehicle efficiency





## Tipping Hoist Models

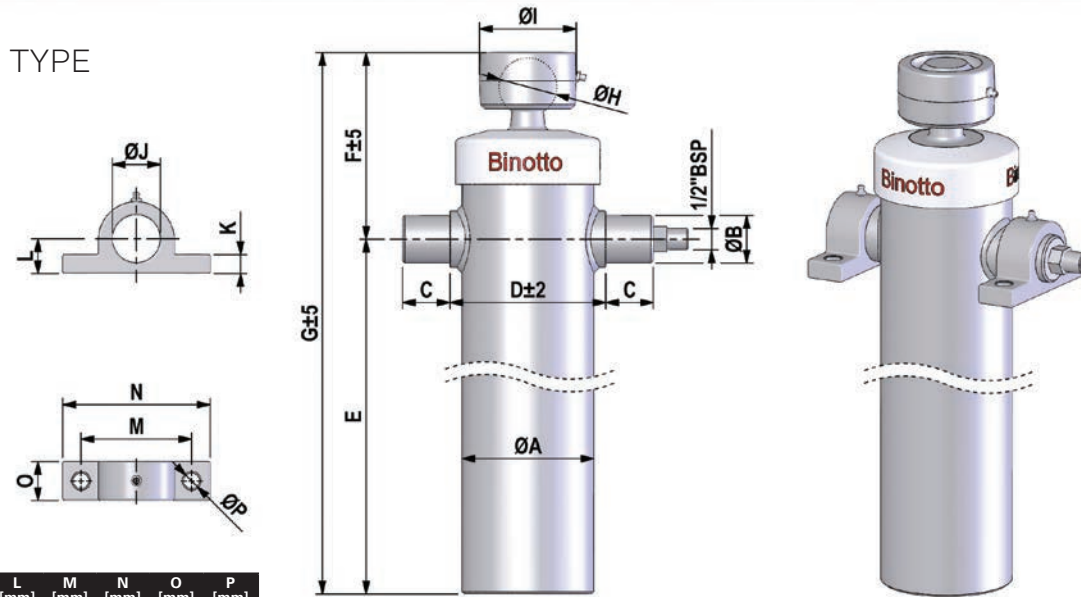
### SPECIFICATION NOTES

- All specifications subject to change without notice. Transport Engineering Solutions accepts no responsibility for any losses incurred from any such changes, including those that occur as a result of fabrication using dimensions shown.
- A tipper body will not meet Australian Standard AS1418.8, or Occupational Health & Safety regulations without a Cylinder Blocking System, or similar safety device, fitted.
- Tipping hoists are designed as a lifting device only, for longitudinal-axis loads. They must not be used as a structural member or be subject to side load.
- Allowable hydraulic-oil temperature range is -40°C to +80°C.
- Maximum duration of extension is 2 hours.
- A Series and B095 to B145 products are zinc plated. All other models are painted grey (RAL 7021). Both finishes conform to corresponding ISO 9227 neutral salt spray tests.
- Hoist capacity relates to the body weight plus the payload. This value, calculated at the rated working pressure, is an approximate indication of tipping capacity, to be used as the first criteria for hoist selection. Actual tipping capacity can only be determined by the tipper designer/manufacturer, and must consider all geometry of the tipper body and operating conditions.
- Rated working pressure 140 bar. Maximum working pressure 200 bar (MFC075 / MFC090 150 bar).
- Never exceed maximum pressure.
- Never exceed maximum hoist load.
- Weights shown include brackets.

### UNDERBODY TIPPING HOIST

#### HIGH-TRUNNION TYPE

## B SERIES



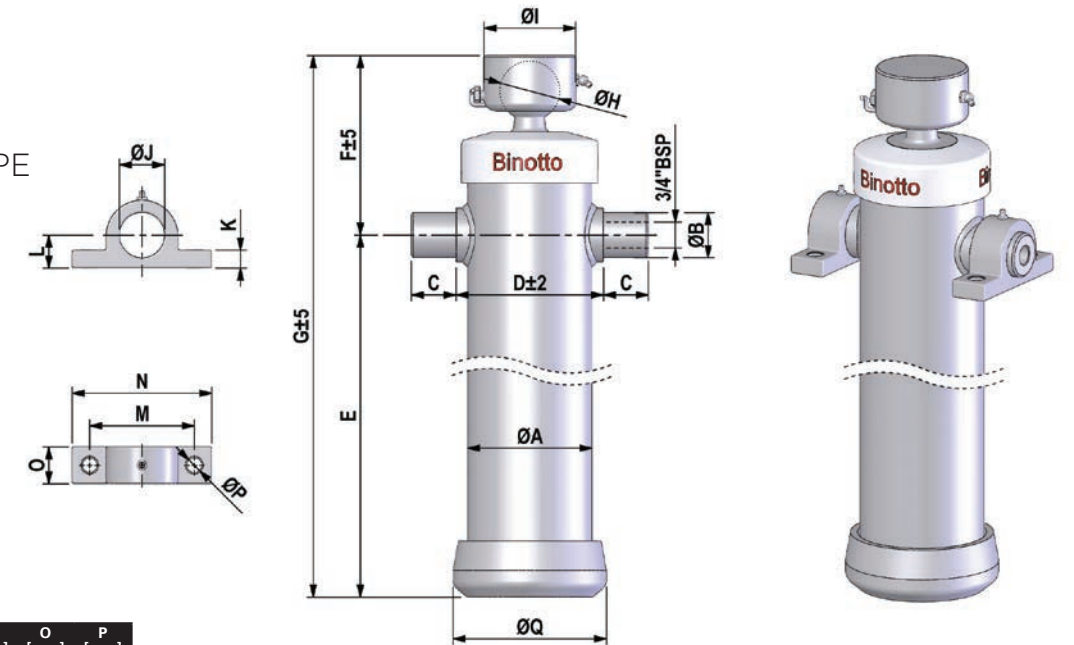
øB [mm]	øJ [mm]	K [mm]	L [mm]	M [mm]	N [mm]	O [mm]	P [mm]
40	40.5	18	33	105	140	37	15
45	45.5	18	33	105	140	37	15

MODEL	STAGES	STROKE [mm]	PIVOTS [48° mm]	CAPACITY [tonne]	VOLUME [L]	WEIGHT [kg]	øA [mm]	øB [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	øH [mm]	øI [mm]
B095.3.0540	3	540	670	4	1.8	14	95	40	40	125	173	154	327	45	88
B095.4.0830	4	830	1030	2.5	2.3	15	95	40	40	125	199	155	354	45	88
B110.4.0825	4	825	1020	4.5	3.6	20	110	40	40	148	207	157	364	45	88
B125.4.1435	4	1435	1770	7	8.9	40	125	40	40	148	388	171	559	55	90
B125.4.1635	4	1635	2010	7	10	44	125	40	40	148	438	171	609	55	90
B125.4.1940	4	1940	2390	7	12	50	125	40	40	148	514	171	685	55	90
B125.5.1030	5	1030	1270	5	5.5	24	125	40	40	148	207	160	367	45	88
B125.5.1245	5	1245	1540	5	6.7	28	125	40	40	148	250	160	410	45	88
B125.5.1480	5	1480	1820	5	7.9	31	125	40	40	148	297	160	457	45	88
B125.5.2045	5	2045	2520	5	11	42	125	40	40	148	439	160	599	45	88
B125.5.2425	5	2425	2990	5	13	50	125	40	40	148	515	160	675	45	88
B125.6.1000	6	1000	1230	4	4.7	20	125	40	40	148	182	148	330	45	88
B145.5.1170	5	1170	1440	8	8.7	40	145	45	45	165	278	161	439	55	90
B145.5.2040	5	2040	2510	8	15	59	145	45	45	165	452	161	613	55	90
B145.5.2420	5	2420	2980	8	18	66	145	45	45	165	528	161	689	55	90
B145.6.1410	6	1410	1740	7	9.2	38	145	45	45	165	265	163	428	45	88
B145.6.1705	6	1705	2100	7	11	43	145	45	45	165	314	163	477	45	88
B145.6.2910	6	2910	3580	7	19	66	145	45	45	165	515	163	678	45	88

### UNDERBODY TIPPING HOIST

#### HIGH-TRUNNION TYPE

## B SERIES



øJ [mm]	K [mm]	L [mm]	M [mm]	N [mm]	O [mm]	P [mm]
50.5	18	33	105	140	37	15

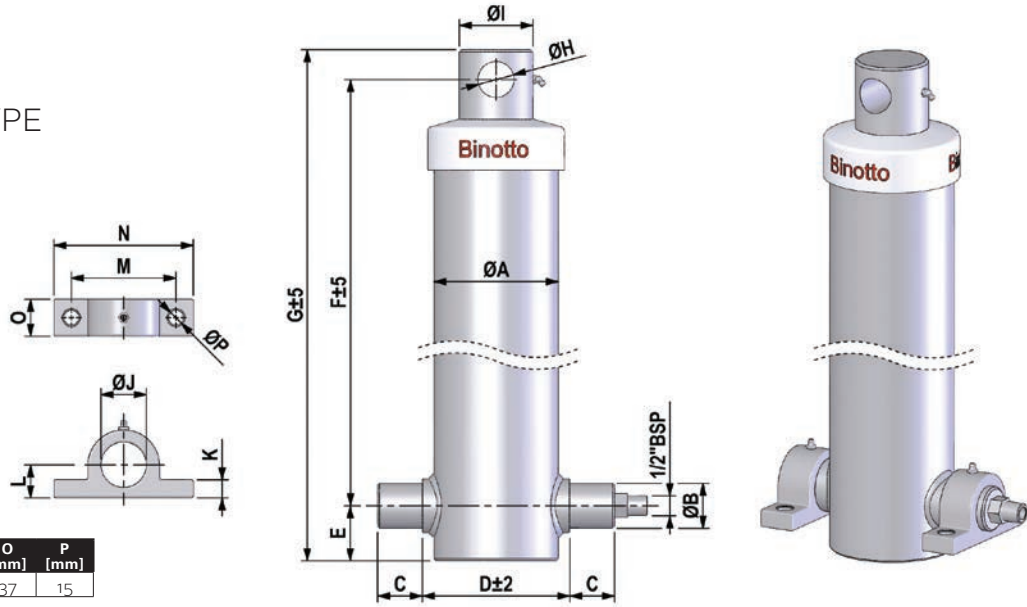
MODEL	STAGES	STROKE [mm]	PIVOTS [48° mm]	CAPACITY [tonne]	VOLUME [L]	WEIGHT [kg]	øA [mm]	øB [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	øH [mm]	øI [mm]	øQ [mm]
B188.6.1770	6	1770	2175	14	21	80	188	50	45	225	274	250	524	60	93	214
B188.7.1505	7	1505	1850	11	16	68	188	50	45	225	198	250	448	60	93	214
B213.6.2640	6	2640	3250	22	41	126	213	50	45	250	435	250	685	68	110	244
B213.8.1720	8	1720	2110	13	22	90	213	50	45	250	205	250	455	60	93	244



## UNDERBODY TIPPING HOIST

BOTTOM-TRUNNION TYPE

### A SERIES



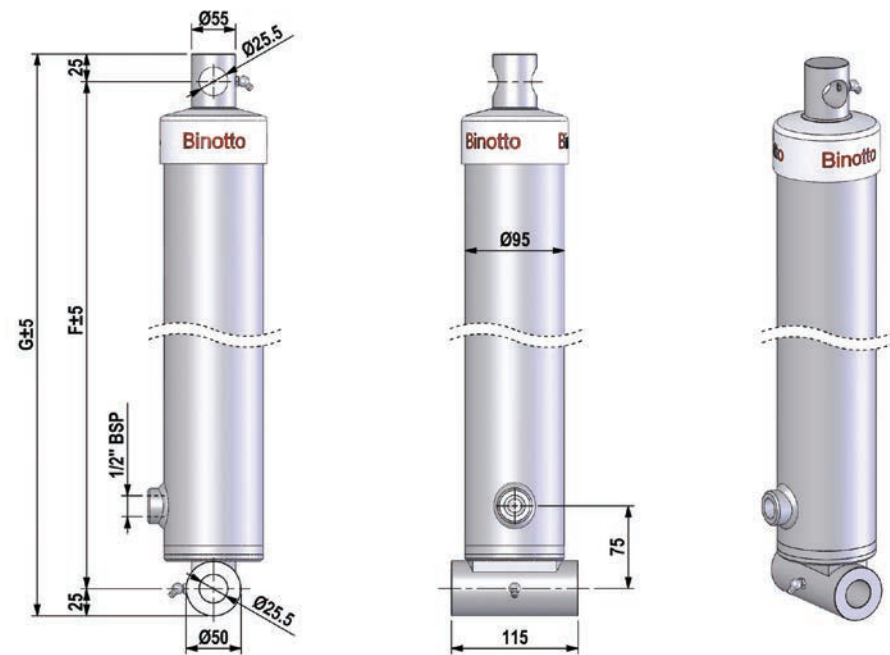
øJ [mm]	K [mm]	L [mm]	M [mm]	N [mm]	O [mm]	P [mm]
45,5	18	33	105	140	37	15

MODEL	STAGES	STROKE [mm]	CAPACITY [tonne]	VOLUME [L]	WEIGHT [kg]	øA [mm]	øB [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	øH [mm]	øI [mm]
A095.2.0590	2	590	5	2.5	19	95	40	40	125	40	370	440	31	59
A095.2.0815	2	815	5	3.4	25	95	40	40	125	40	512	582	31	59
A095.3.0845	3	845	4	2.9	17	95	40	40	125	40	358	421	26	44
A125.3.1150	3	1150	8	8.3	31	125	40	40	148	55	483	568	36	74
A125.4.1135	4	1135	7	7.1	33	125	40	40	148	55	386	471	31	59
A125.4.1280	4	1280	7	8.0	36	125	40	40	148	55	422	507	31	59
A125.4.1435	4	1435	7	8.9	39	125	40	40	148	55	461	446	31	59
A125.4.1635	4	1635	7	10	43	125	40	40	148	55	511	596	31	59
A145.5.2180	5	2180	8	16	60	145	45	45	165	55	547	632	31	59

## UNDERBODY TIPPING HOIST

EYE-TO-EYE TYPE

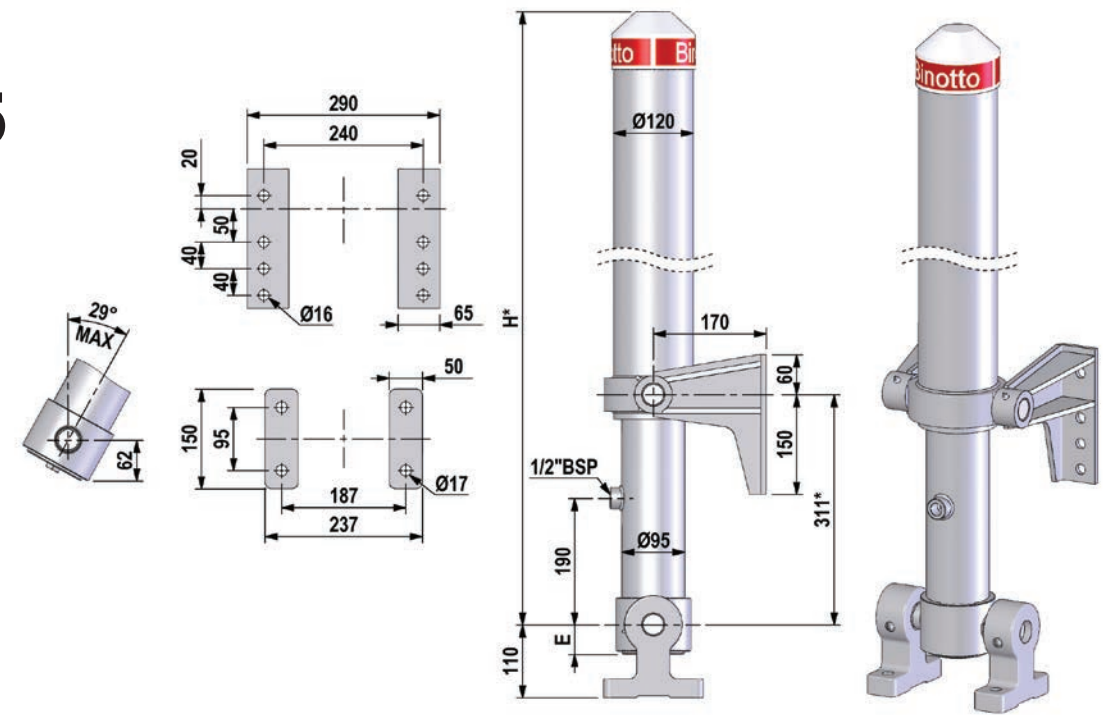
### AA SERIES



MODEL	STAGES	STROKE [mm]	CAPACITY [tonne]	VOLUME [L]	WEIGHT [kg]	F [mm]	G [mm]
AA095.2.1380	2	1380	5	5.8	41	915	965
AA095.2.1580	2	1580	5	6.6	46	1015	1065

## FRONT-MOUNT TIPPING HOIST

### MFC075 SERIES

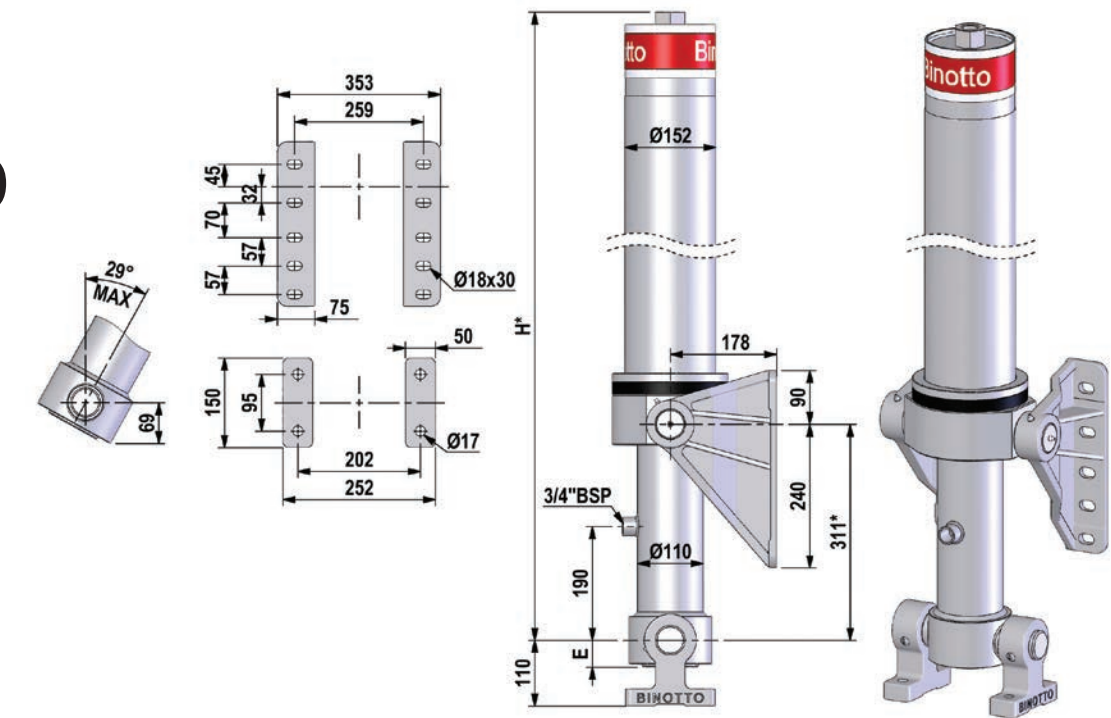


MODEL	STAGES	STROKE [mm]	PIVOTS [48° mm]	CAPACITY [tonne]	VOLUME [L]	WEIGHT [kg]	E [mm]	H* [mm]
MFC075.3.2600	3	2600	3200	8	8.9	89	55	1222
MFC075.3.3000	3	3000	3700	8	10	87	55	1222

\*Includes 20mm pull-out

## FRONT-MOUNT TIPPING HOIST

### MFC090 SERIES

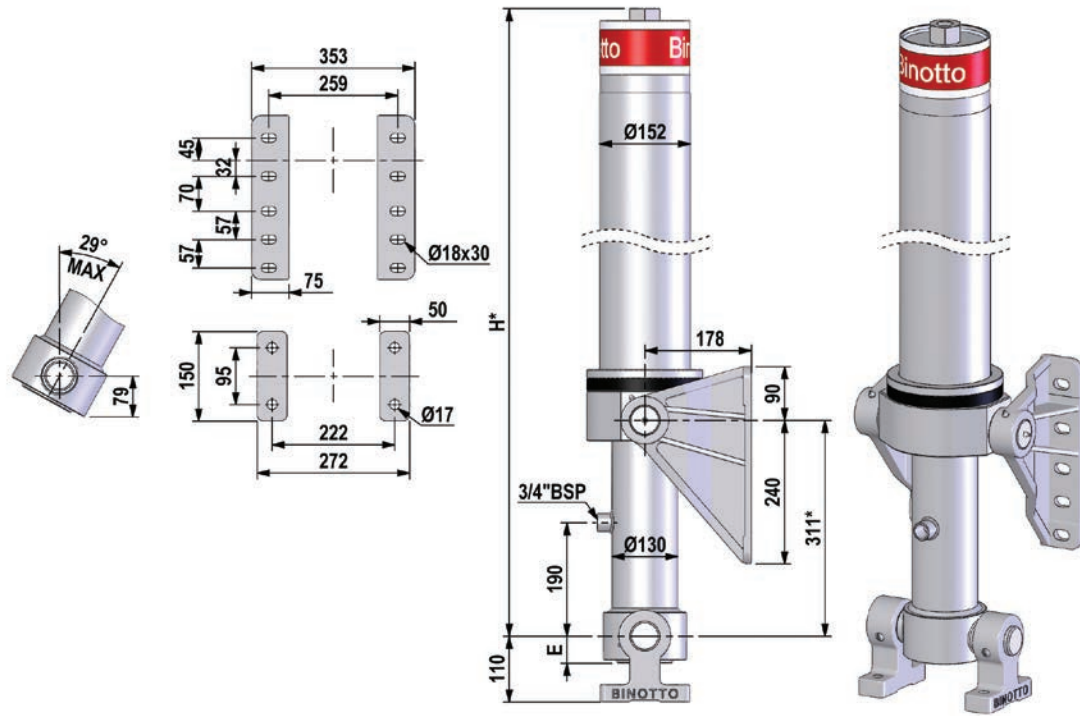


MODEL	STAGES	STROKE [mm]	PIVOTS [48° mm]	CAPACITY [tonne]	VOLUME [L]	WEIGHT [kg]	E [mm]	H* [mm]
MFC090.3.3000	3	3000	3700	12	15	154	55	1391
MFC090.3.3375	3	3375	4150	12	17	152	55	1391
MFC090.3.3675	3	3675	4500	12	19	165	55	1491

\*Includes 20mm pull-out



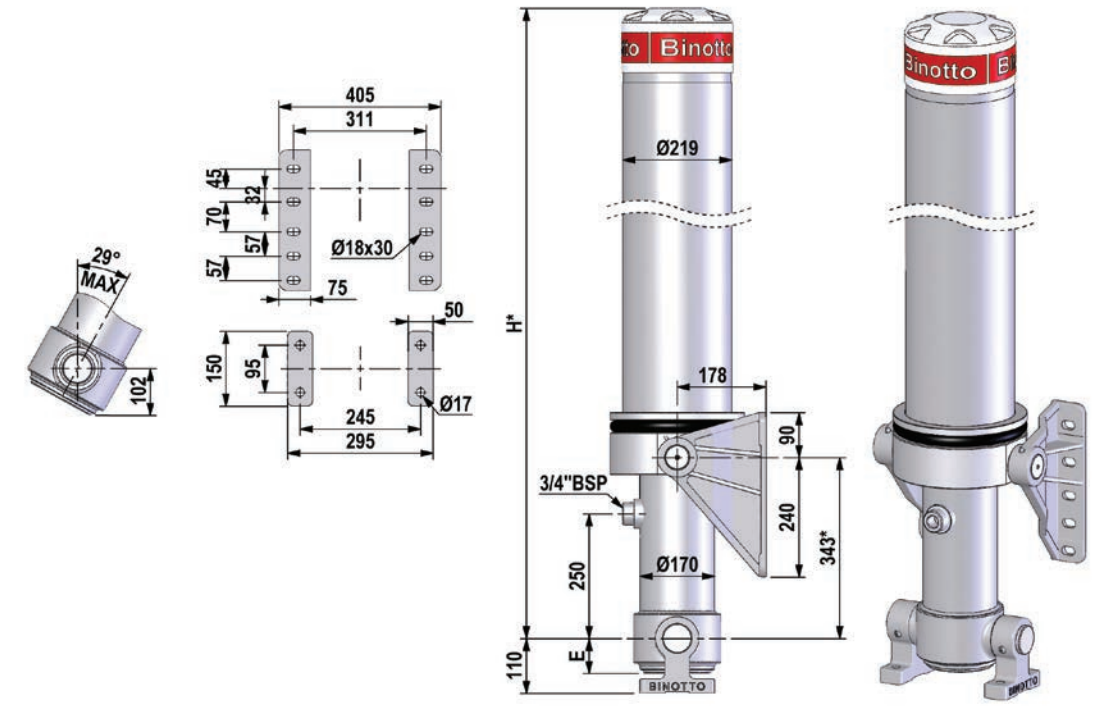
## MFC108 SERIES



MODEL	STAGES	STROKE [mm]	PIVOTS [48° mm]	CAPACITY [tonne]	VOLUME [L]	WEIGHT [kg]	E [mm]	H* [mm]
MFCB3108.3.2330	3	2330	2800	18	15	148	55	1068
MFCB3108.3.3115	3	3115	3850	18	21	172	55	1368
MFCB3108.3.3415	3	3415	4200	18	23	180	55	1468
MFCB3108.4.3805	4	3805	4700	15	22	158	55	1272
MFCB3108.4.4145	4	4145	5100	15	24	166	55	1372

\*Includes 20mm pull-out

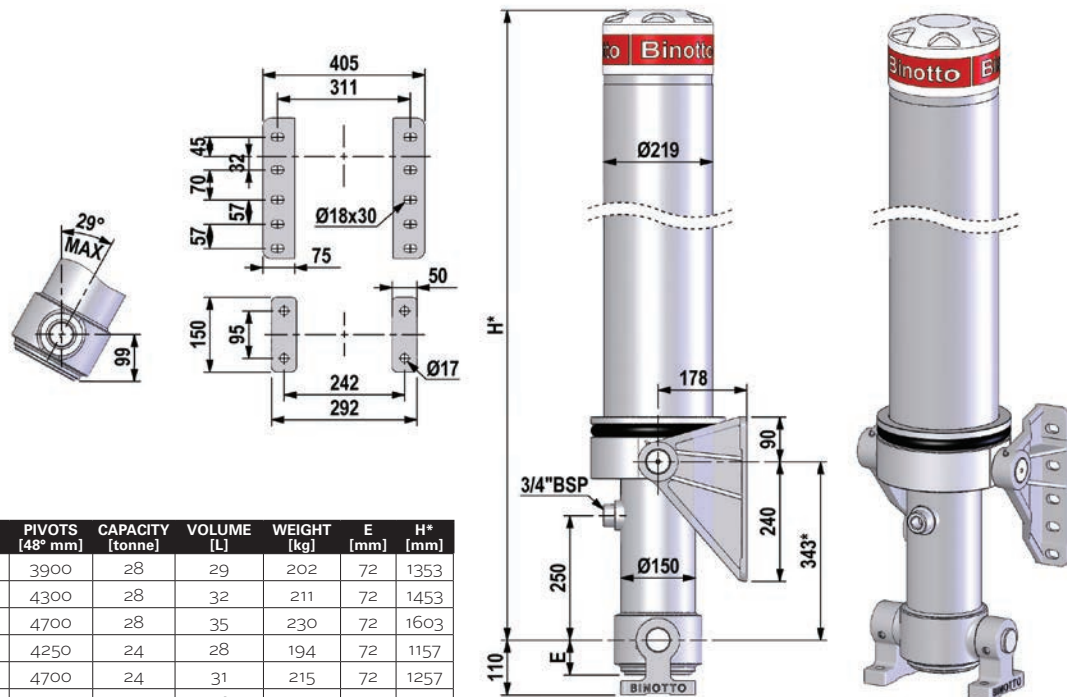
## MFC145 SERIES



MODEL	STAGES	STROKE [mm]	PIVOTS [48° mm]	CAPACITY [tonne]	VOLUME [L]	WEIGHT [kg]	E [mm]	H* [mm]
MFCB3145.5.5170	5	5170	6400	27	51	258	72	1361
MFCB3145.5.5670	5	5670	6950	27	56	271	72	1461

\*Includes 20mm pull-out

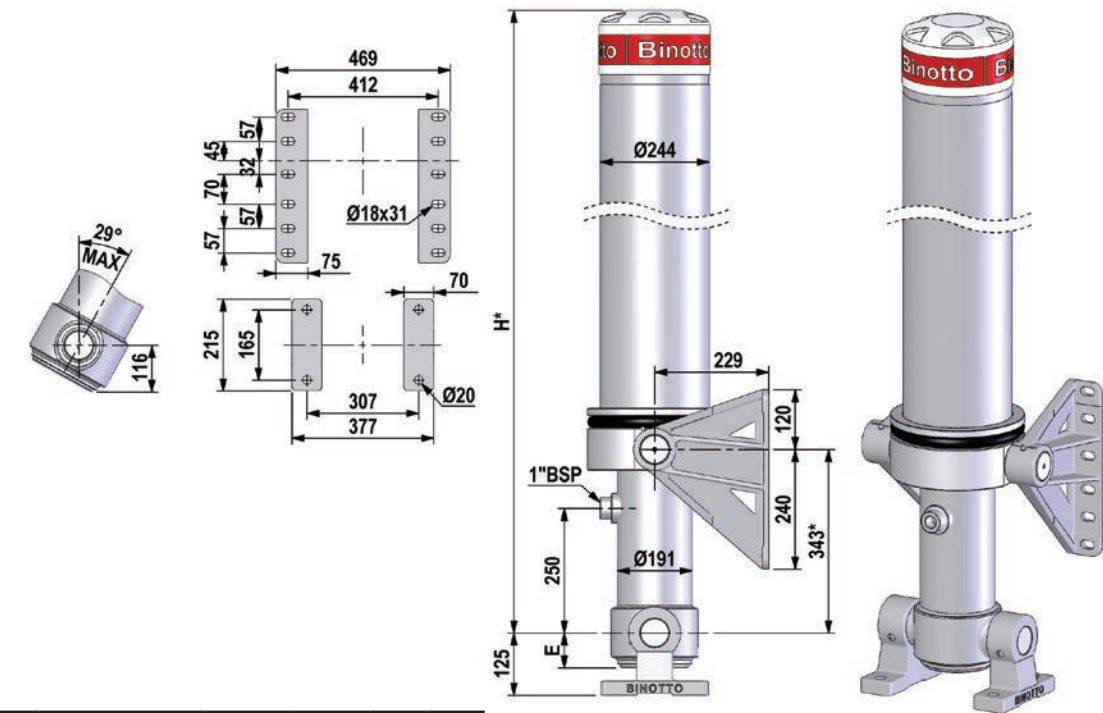
## MFC126 SERIES



MODEL	STAGES	STROKE [mm]	PIVOTS [48° mm]	CAPACITY [tonne]	VOLUME [L]	WEIGHT [kg]	E [mm]	H* [mm]
MFCB3126.3.3190	3	3190	3900	28	29	202	72	1353
MFCB3126.3.3490	3	3490	4300	28	32	211	72	1453
MFCB3126.3.3830	3	3830	4700	28	35	230	72	1603
MFCB3126.4.3450	4	3450	4250	24	28	194	72	1157
MFCB3126.4.3805	4	3805	4700	24	31	215	72	1257
MFCB3126.4.4345	4	4345	5350	24	36	229	72	1407
MFCB3126.4.4745	4	4745	5850	24	39	242	72	1507
MFCB3126.4.5145	4	5145	6300	24	42	255	72	1607

\*Includes 20mm pull-out

## MFC165 SERIES

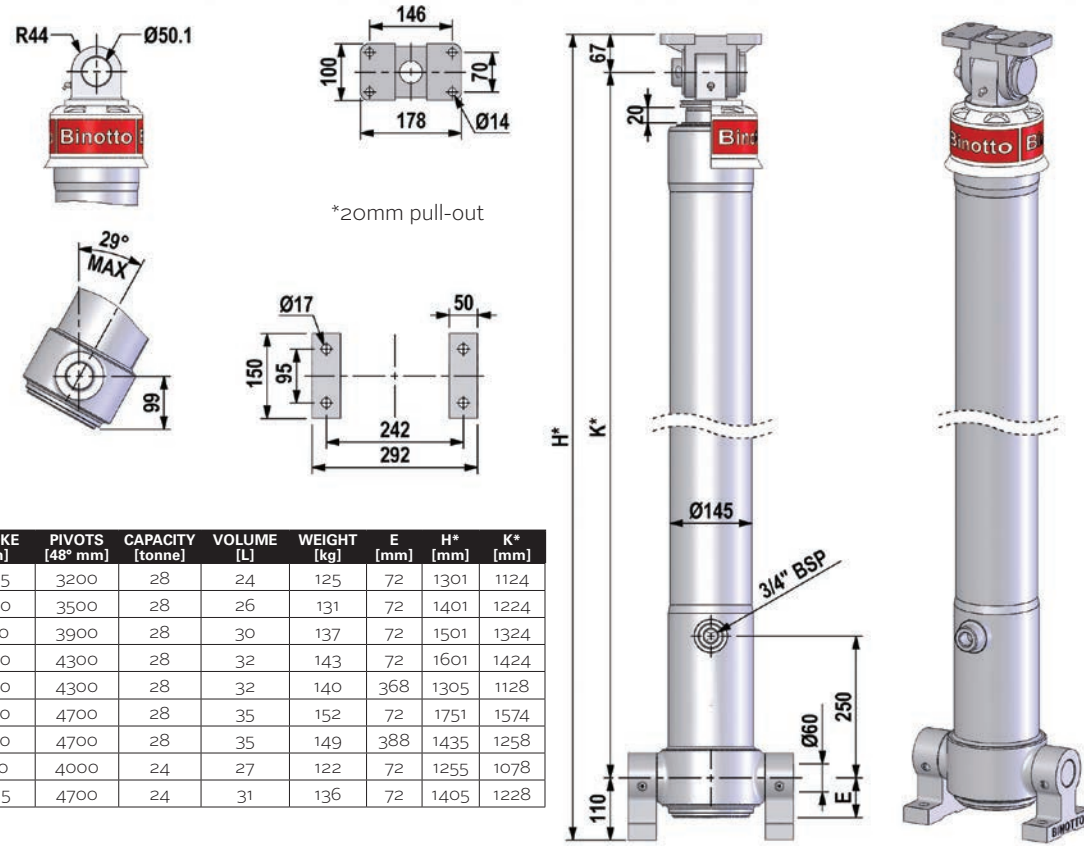


MODEL	STAGES	STROKE [mm]	PIVOTS [48° mm]	CAPACITY [tonne]	VOLUME [L]	WEIGHT [kg]	E [mm]	H* [mm]
MFCB3165.5.6135	5	6135	7550	37	80	362	82	1551

\*Includes 20mm pull-out

## WELL-MOUNT TIPPING HOIST

### MF126 SERIES



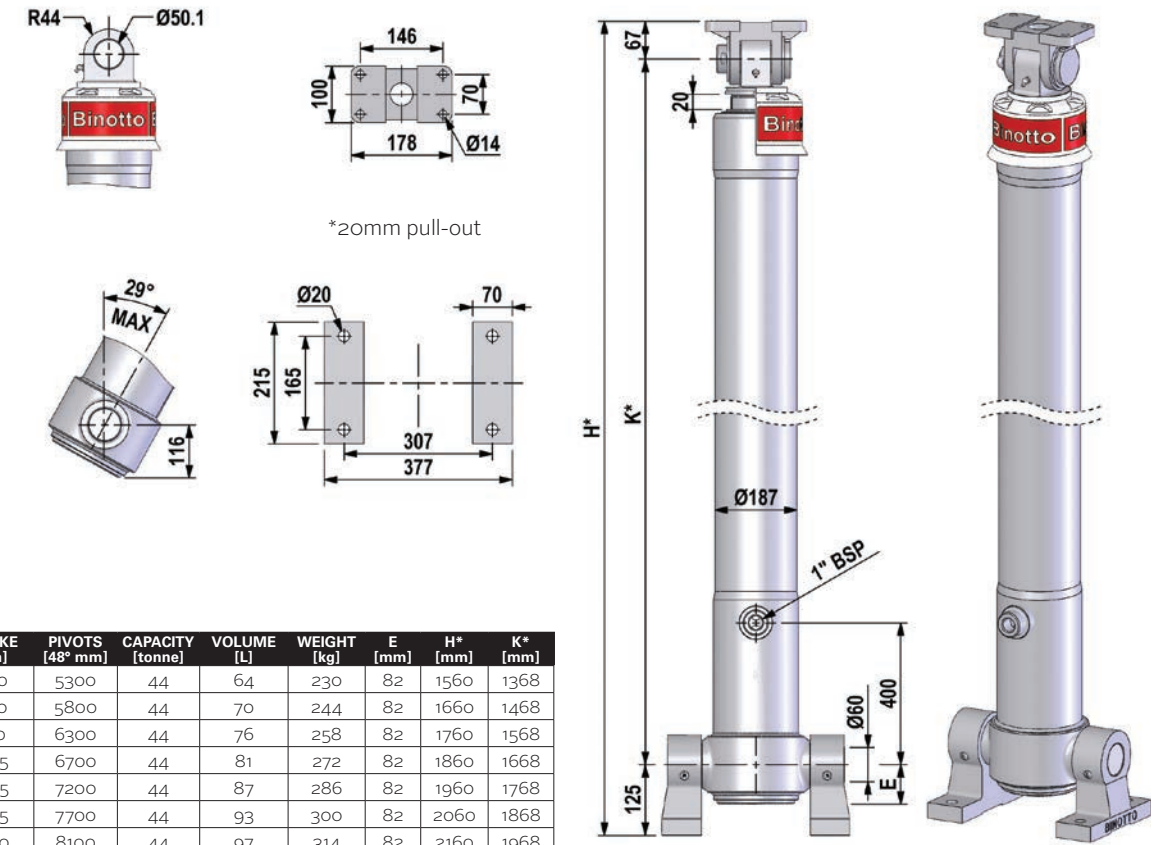
\*20mm pull-out

MODEL	STAGES	STROKE [mm]	PIVOTS [48° mm]	CAPACITY [tonne]	VOLUME [L]	WEIGHT [kg]	E [mm]	H* [mm]	K* [mm]
MFB3126.3.2585	3	2585	3200	28	24	125	72	1301	1124
MFB3126.3.2840	3	2840	3500	28	26	131	72	1401	1224
MFB3126.3.3190	3	3190	3900	28	30	137	72	1501	1324
MFB3126.3.3490	3	3490	4300	28	32	143	72	1601	1424
MFB3126.3.3490RT	3	3490	4300	28	32	140	368	1305	1128
MFB3126.3.3830	3	3830	4700	28	35	152	72	1751	1574
MFB3126.3.3830RT	3	3830	4700	28	35	149	388	1435	1258
MFB3126.4.3310	4	3310	4000	24	27	122	72	1255	1078
MFB3126.4.3805	4	3805	4700	24	31	136	72	1405	1228

\*Includes 20mm pull-out

## WELL-MOUNT TIPPING HOIST

### MF165 SERIES



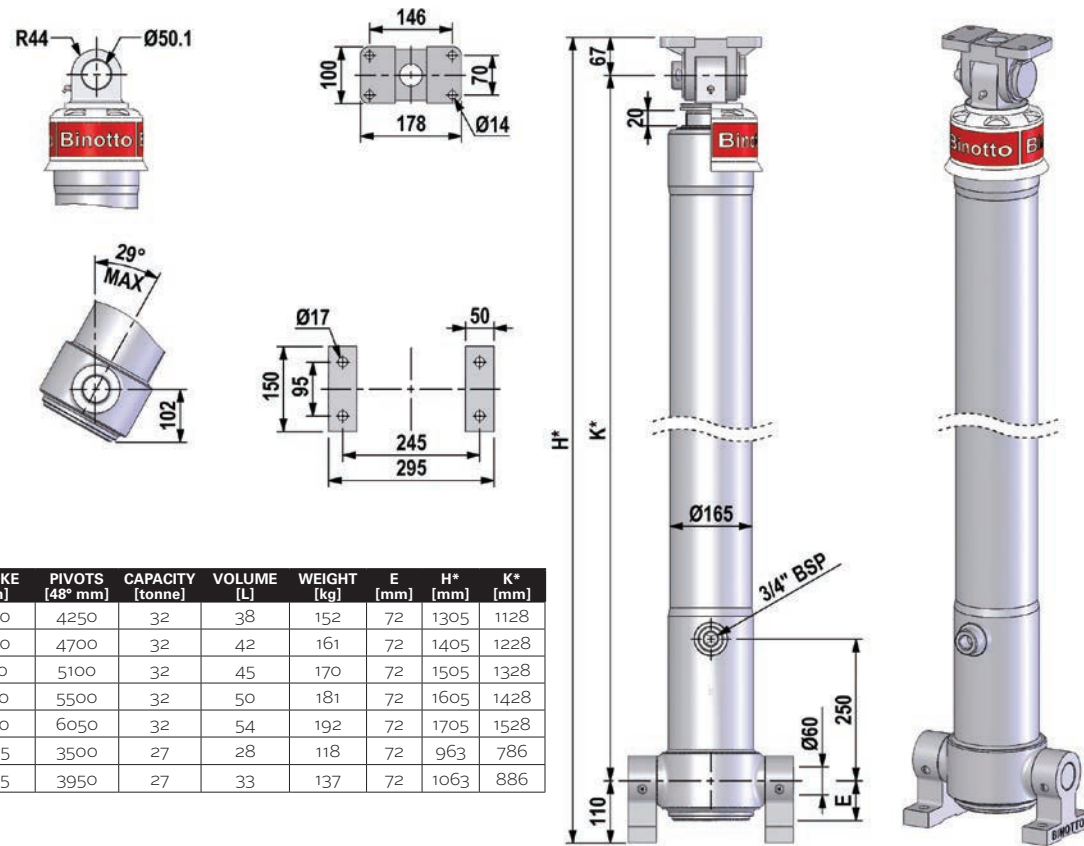
\*20mm pull-out

MODEL	STAGES	STROKE [mm]	PIVOTS [48° mm]	CAPACITY [tonne]	VOLUME [L]	WEIGHT [kg]	E [mm]	H* [mm]	K* [mm]
MFB3165.4.4310	4	4310	5300	44	64	230	82	1560	1368
MFB3165.4.4710	4	4710	5800	44	70	244	82	1660	1468
MFB3165.4.5110	4	5110	6300	44	76	258	82	1760	1568
MFB3165.4.5465	4	5465	6700	44	81	272	82	1860	1668
MFB3165.4.5865	4	5865	7200	44	87	286	82	1960	1768
MFB3165.4.6265	4	6265	7700	44	93	300	82	2060	1868
MFB3165.4.6560	4	6560	8100	44	97	314	82	2160	1968

\*Includes 20mm pull-out

## WELL-MOUNT TIPPING HOIST

### MF145 SERIES

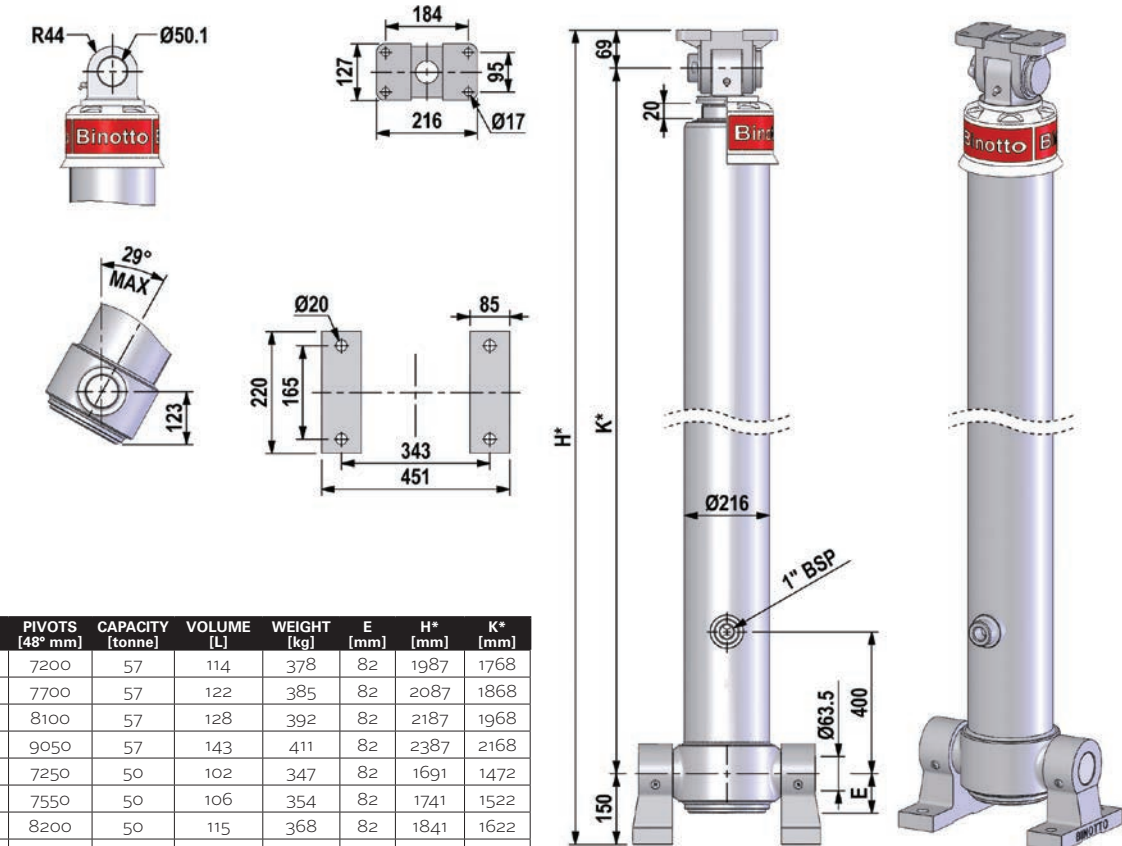


MODEL	STAGES	STROKE [mm]	PIVOTS [48° mm]	CAPACITY [tonne]	VOLUME [L]	WEIGHT [kg]	E [mm]	H* [mm]	K* [mm]
MFB3145.4.3450	4	3450	4250	32	38	152	72	1305	1128
MFB3145.4.3790	4	3790	4700	32	42	161	72	1405	1228
MFB3145.4.4110	4	4110	5100	32	45	170	72	1505	1328
MFB3145.4.4510	4	4510	5500	32	50	181	72	1605	1428
MFB3145.4.4910	4	4910	6050	32	54	192	72	1705	1528
MFB3145.5.2825	5	2825	3500	27	28	118	72	963	786
MFB3145.5.3225	5	3225	3950	27	33	137	72	1063	886

\*Includes 20mm pull-out

## WELL-MOUNT TIPPING HOIST

### MF187 SERIES



MODEL	STAGES	STROKE [mm]	PIVOTS [48° mm]	CAPACITY [tonne]	VOLUME [L]	WEIGHT [kg]	E [mm]	H* [mm]	K* [mm]
MFB3187.4.5865	4	5865	7200	57	114	378	82	1987	1768
MFB3187.4.6265	4	6265	7700	57	122	385	82	2087	1868
MFB3187.4.6560	4	6560	8100	57	128	392	82	2187	1968
MFB3187.4.7360	4	7360	9050	57	143	411	82	2387	2168
MFB3187.5.5885	5	5885	7250	50	102	347	82	1691	1472
MFB3187.5.6135	5	6135	7550	50	106	354	82	1741	1522
MFB3187.5.6635	5	6635	8200	50	115	368	82	1841	1622
MFB3187.5.7075	5	7075	8700	50	123	382	82	1941	1722
MFB3187.5.7575	5	7575	9350	50	132	403	82	2041	1822

\*Includes 20mm pull-out



# Binotto

THE TIPPING POWER



## The TES Difference

**Transport Engineering Solutions offers a product range and capability throughout its nationwide branch network that is second to none.**

We have built our reputation on the simple and proven philosophy of providing quality products combined with excellent customer service.

Our range includes international and local brands – many of them exclusive to TES. We are always developing new products and sourcing components and systems to give our customers access to the latest technologies.

We continue to build on our reputation for quality, innovation, reliability and advice.

Most importantly, we understand that in real world situations, true value-for-money comes from the full-service life-cycle of a component.

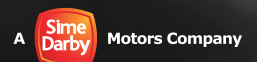
The technical expertise and experience of our staff ensures that valuable advice and back-up is available for every item in our range. Customers can also access the expertise of our in-house design and engineering staff.

**PHONE: 1300 300 375**

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TRANSPORT  
ENGINEERING SOLUTIONS



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