

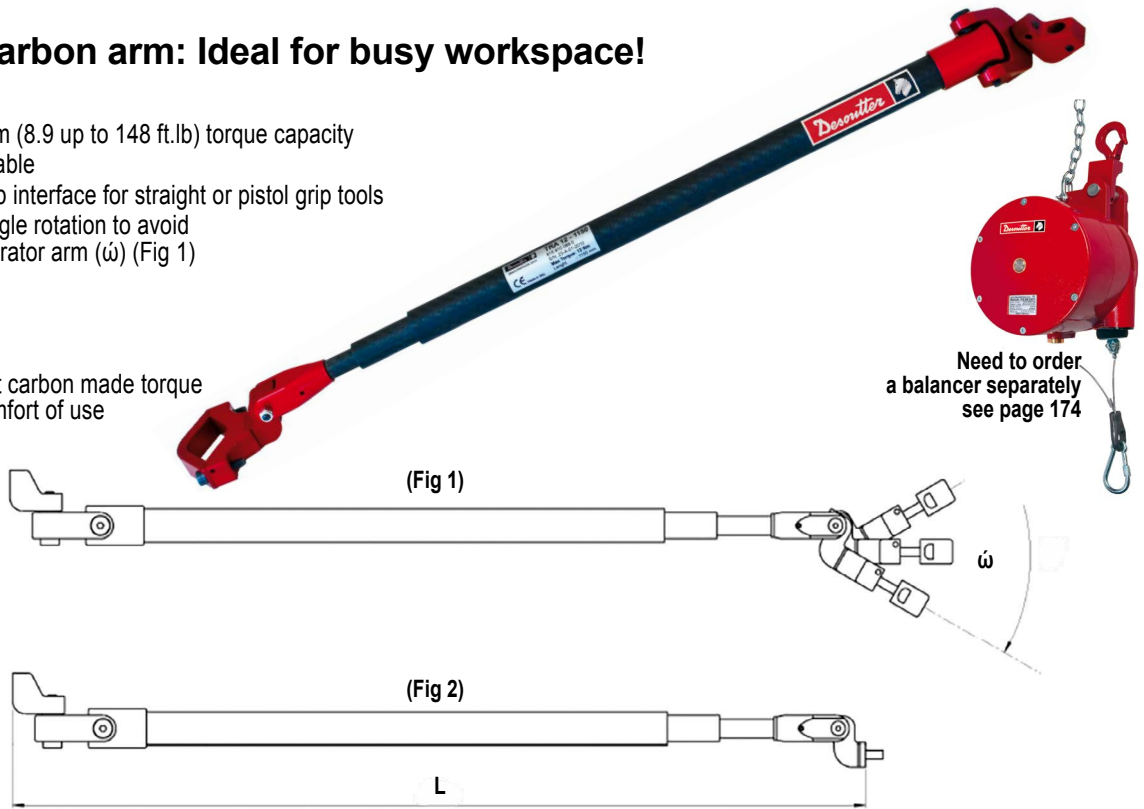
# TRA - Telescopic reaction arms

## Telescopic carbon arm: Ideal for busy workspace!

- From 12 up to 200 Nm (8.9 up to 148 ft.lb) torque capacity
- Several lengths available
- 90 degrees tool clamp interface for straight or pistol grip tools
- Limited tool clamp angle rotation to avoid side forces in the operator arm ( $\omega$ ) (Fig 1)

### Benefits:

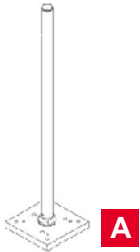
- Extremely lightweight carbon made torque arm for improved comfort of use
- Flexible solution



Need to order a balancer separately see page 174



**B**



**A**



**C**

\*\* Universal balancer adapter

### OPTIONAL ACCESSORIES

ITEM	DESCRIPTION	PART NUMBER
A	Bench stand Ø 32mm (1.26") - H 753mm (29.64")	615 810 194 0
B	Bench stand holder Ø 32mm (1.26") for TRA 12/25	615 810 121 0
B	Bench stand holder Ø 32mm (1.26") for TRA 50/100	615 810 140 0
C	Universal balancer adapter	615 397 922 5

MODEL	PART NUMBER	MAXIMUM TORQUE		MAX. MIN LENGTH L		$\omega$ (DEG)	WEIGHT		TOOL CLAMP DIAMETER (INCLUDED WITH THE ARM)	
		Nm	ft. lb	mm	in.		kg	lb	mm	in.
TRA12 1150*	615 810 089 0	12	8.9	516-1128	20-44	170	0.46	1.01	28-49	1.10-1.92
TRA12 1600*	615 810 090 0	12	8.9	666-1578	26-62	170	0.51	1.12	28-49	1.10-1.92
TRA12 2100*	615 810 091 0	12	8.9	835-2083	32-82	170	0.57	1.26	28-49	1.10-1.92
TRA25 1150*	615 810 092 0	25	18.4	524-1124	20-44	170	0.60	1.32	28-49	1.10-1.92
TRA25 1600*	615 810 093 0	25	18.4	674-1574	26-62	170	0.70	1.54	28-49	1.10-1.92
TRA25 2100*	615 810 094 0	25	18.4	841-2075	33-82	170	0.77	1.70	28-49	1.10-1.92
TRA25 2600*	615 810 095 0	25	18.4	1007-2573	39-101	170	0.86	1.89	28-49	1.10-1.92
TRA50 1600*	615 810 096 0	50	36.9	712-1624	28-64	40	1.14	2.51	28-50	1.10-1.97
TRA50 2100*	615 810 097 0	50	36.9	878-2125	34-84	40	1.24	2.73	28-50	1.10-1.97
TRA50 2600*	615 810 098 0	50	36.9	1045-2626	41-103	40	1.34	2.95	28-50	1.10-1.97
TRA100 1600	615 810 099 0	100	73.8	722-1628	28-64	30	1.47	3.24	To order separately (see page 168)	
TRA100 2100	615 810 100 0	100	73.8	889-2129	35-83	30	1.41	3.11		
TRA100 2600	615 810 101 0	100	73.8	1056-2630	41-103	30	1.53	3.37		
TRA200 1600	615 810 102 0	200	148	726-1628	28-64	20	1.98	4.36		
TRA200 2100	615 810 103 0	200	148	893-2129	35-84	20	2.18	4.80		
TRA200 2600	615 810 104 0	200	148	1060-2630	41-103	20	2.39	5.27		

(\* Universal TRA tool clamp included (\*\* Universal balancer adapters: 1 kit = 7 parts for all Desoutter balancer types: Part No. 615 397 922 5

# TRA - Positioning telescopic arms for Posco 500

## TRA with positioning system allows to track the tool position during the assembly process

Same telescopic arm as the standard one: from 12 to 200 Nm (8.9 to 148 ft.lb) torque capacity

### 2 different versions:

- 1 encoder: length measurement
- 2 encoders: length measurement + angle control
- This arm is intended to be used together with our POSCO 500 to program a complete fastening sequence
- Accuracy: +/- 5mm

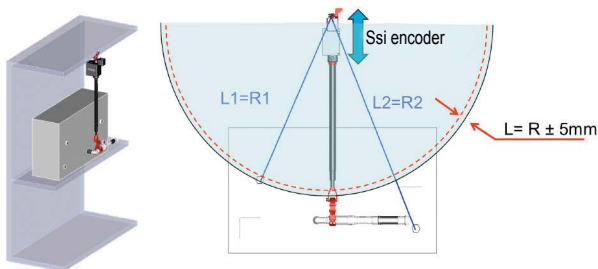


Need to order a balancer separately See page 174

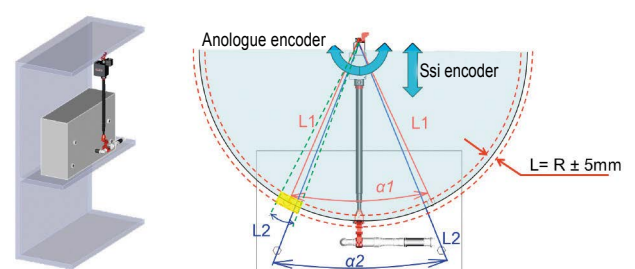


\*\*Universal balancer adapter

1 encoder system



2 encoders system



MODEL	PART NUMBER	NUMBER OF ENCODER	MAXIMUM TORQUE		MAX. MIN. LENGTH		TOOL CLAMP DIAMETER	
			Nm	ft.lb	mm	in.	mm	in.
TRA 12 1600 UNI P *	615 811 694 0	1	12	8.8	1762	69	28 - 49	1.10 - 1.92
TRA 25 2100 UNI P *	615 811 670 0	1	25	18.4	2259	89	28 - 49	1.10 - 1.92
TRA 50 2100 UNI P *	615 811 676 0	1	50	36.8	2311	91	28 - 49	1.10 - 1.92
TRA 100 2100 P	615 811 682 0	1	100	73.7	2315	91	To be ordered separately (page166)	
TRA 200 2100 P	615 811 688 0	1	200	147.4	2317	91	To be ordered separately (page166)	
TRA 12 1600 UNI P2 *	615 811 695 0	2	12	8.8	1762	69	28 - 49	1.10 - 1.92
TRA 25 2100 UNI P2 *	615 811 671 0	2	25	18.4	2259	89	28 - 49	1.10 - 1.92
TRA 50 2100 UNI P2 *	615 811 677 0	2	50	36.8	2311	91	28 - 49	1.10 - 1.92
TRA 100 2100 P2	615 811 683 0	2	100	73.7	2315	91	To be ordered separately (page166)	
TRA 200 2100 P2	615 811 689 0	2	200	147.4	2317	91	To be ordered separately (page166)	

(\*) Universal TRA tool clamp included

(\*\*) Universal balancer adapters: 1 kit = 7 parts for all Desoutter balancer types. Part Nr. 615 397 922 5

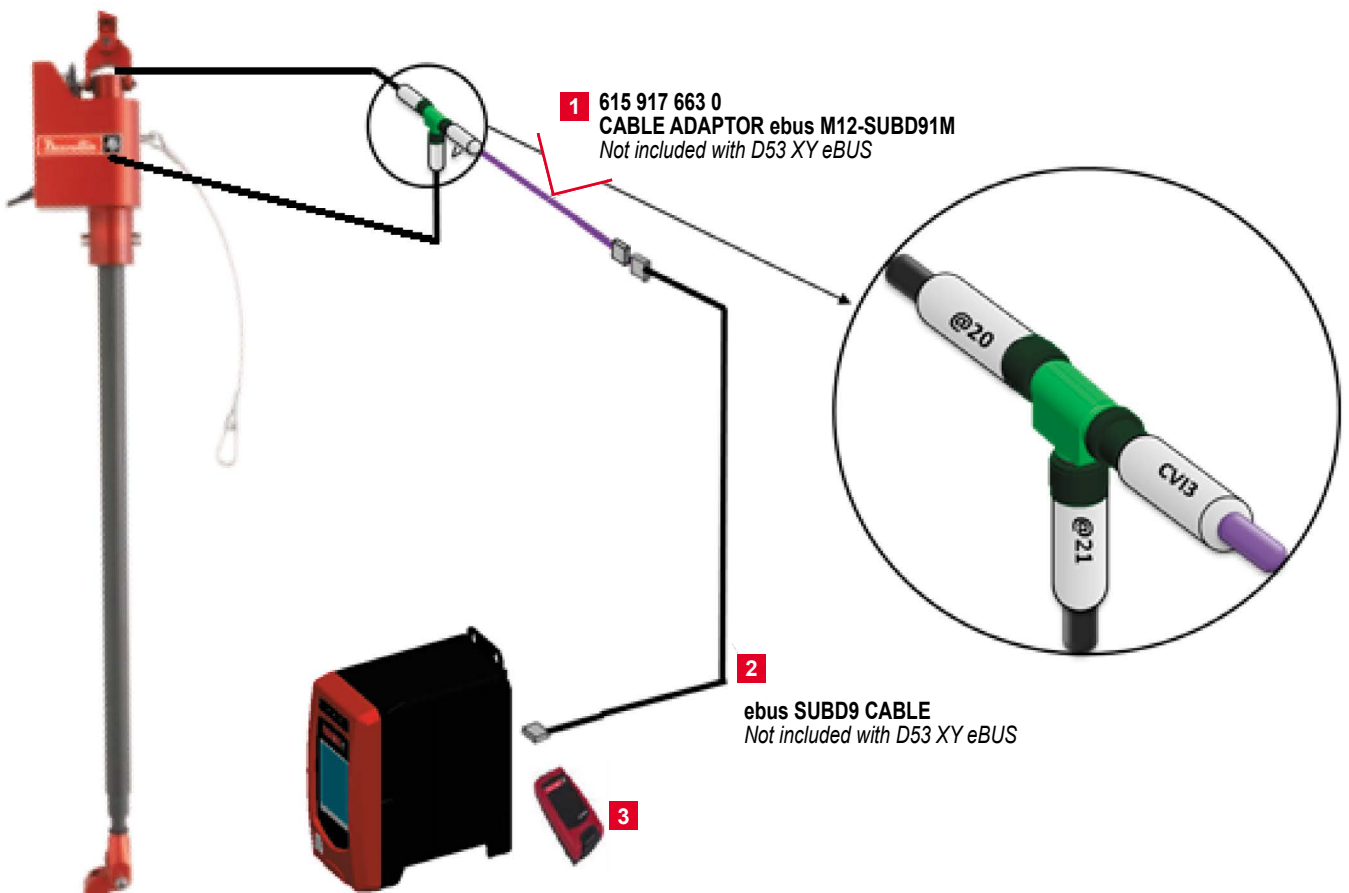
# TRA X/Y – Positioning arms for CVI3

**Same telescopic arms as the standard one: up to 200Nm (148 ft.lb.) torque capacity**

- TRA X/Y CANopen arms allows to track the tool position during assembly process
- 2 different versions:
  - 1 encoder: length measurement
  - 2 encoders: length measurement + angle control
- This arm is intended to be used together with our CVI3 controller
- Accuracy: +/- 5mm
- Connected directly to the CVI3 controller
- Needs ePOD 2 or higher
- Easy positioning learning mode

**ACCESSORIES NEEDED :**

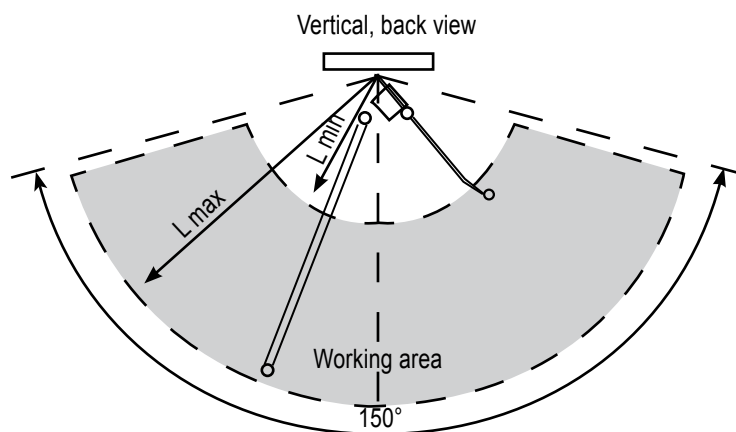
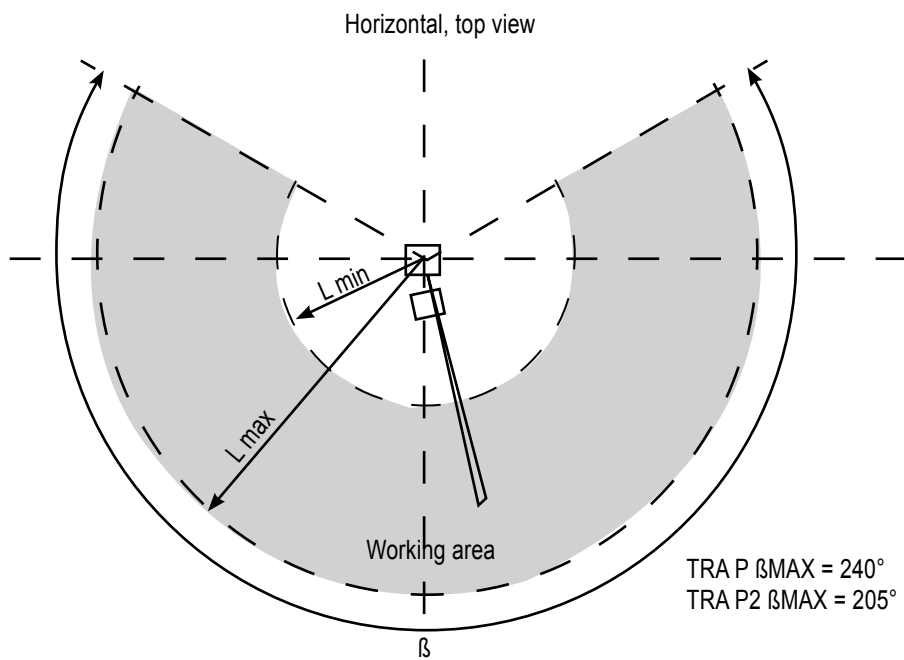
- 1** Cable adaptor EBUS M12 / SUBD9 6159176630
- 2** Select one of them :
  - eBUS SUBD9 cable 3m 6159176220
  - eBUS SUBD9 cable 5m 6159176230
  - eBUS SUBD9 cable 15m 6159176240
- 3** Select one ePOD :
  - ePOD2 6159360760
  - ePOD3 6159360770
  - Needs ePOD 2 or higher
  - Easy positioning learning mode



# TRA X/Y – Positioning arms for CVI3

MODEL	PART NUMBER	TORQUE MAX		L MIN		L MAX		STROKE		WEIGHT	
		Nm	Ft.lb	mm	in	mm	in	mm	in	kg	lb
TRA 12 1600 P UNI	615 812 102 0	12	8.9	883.5	34.78	1762	69.4	887.5	34.6	4	8.8
TRA 25 2100 P UNI	615 812 103 0	25	18.4	1053.5	41.47	2259	88.9	1205.5	47.5	4.2	9.3
TRA 50 2100 P UNI	615 812 104 0	50	36.9	1105	43.5	2311	91	1206	47.5	4.6	10.1
TRA 100 2100 UNI	615 812 105 0	100	73.8	1080	42.5	2315	91.15	1235	48.6	4.8	10.6
TRA 200 2100 P UNI	615 812 106 0	200	148	1085	42.7	2317	91.2	1232	48.5	6.4	14.1
TRA 12 1600 P2	615 812 107 0	12	8.9	883.5	34.78	1762	69.4	887.5	34.6	4.2	9.3
TRA 25 2100 P2	615 812 108 0	25	18.4	1053.5	41.47	2259	88.9	1205.5	47.5	4.4	9.7
TRA 50 2100 P2	615 812 109 0	50	36.9	1105	43.5	2311	91	1206	47.5	4.8	10.6
TRA 100 2100 P2	615 812 110 0	100	73.8	1080	42.5	2315	91.15	1235	48.6	5	11
TRA 200 2100 P2	615 812 111 0	200	148	1085	42.7	2317	91.2	1232	48.5	6.8	15

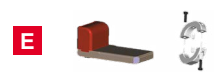
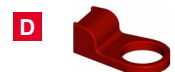
## TRA X/Y CANopen - Dimensions



# The new clamps guide for TRA

## Ordering Process:

SELECT YOUR TOOL	SELECT THE ARM ACCORDING TO: - THE TORQUE APPLICATION - THE REACH NEEDED	ADD THE TOOL CLAMP. IF NOT INCLUDED WITH THE ARM		
STEP 1	STEP 2	STEP 3		
TOOL MODEL	TRA MODEL	TOOL CLAMP REFERENCE	DESCRIPTION	PHOTO
SB/SBP SC2/SCP/SCPT SD/SDP/SDT SH 70/150/200/280 SLBN/SLC/SLCP ECS ERP 3/5/10/20 ECD 5	TRA12* / 25 * * Clamp included with the arm	615 810 118 0 Included with the arm	Universal Clamp 28 - 49mm (1.1 - 1.92")	A
ERP 30/40 ERDL 1,5/2 ERAL 4-90	TRA50* / 100 * Clamp included with the arm	6158101370 Included with TRA50. To be ordered for TRA100	Universal Clamp 28 - 50mm (1.1 - 1.97")	B
SH 420/500	TRA50 TRA100	6158129030 + 6158128940 6158129040 + 6158128940		C
SH 700	TRA50 TRA100	6158129030 + 6158129000 6158129040 + 6158129000		C
SH 850	TRA 100	6158128940 + 6158128970		C
ERAL 1,5/2 ERAL 4 ERAL 6	TRA50 TRA100	6158129030 + 6158128960 6158129040 + 6158128960		C
ECA 15/20/30	TRA 50	6158129030 + 6158128930		C
ECA 40/60	TRA 100	6158129040 + 6158128930		C
EAD 20/32 EAB(C) 26/32/45	TRA50	6158129030 + 6158128880		C
EAD 50-900	TRA50 TRA100	6158129030 + 6158128910 6158129040 + 6158128910		C
EAD 70/80/105 EAB(C) 60	TRA50 TRA100	6158129030 + 6158128950 6158129040 + 6158128950		C
ERDL 4 - 60/80/135 ECD 50/70/120 EID 44/65/75	TRA100 TRA200	6158102030 for TRA100 6158102020 for TRA200 NOT Included with the arm To be ordered	Spline G1 D40,5	D
ERDL 6 - 170/220/250	TRA200	6158102040 NOT Included with the arm To be ordered	Spline G1 D50	D
EDP EID 25/32	TRA 50	6158106280 + 6153965515 NOT Included with the arm To be ordered	Clamp to be welded	E
ECD 20/30	TRA 50	6158106280 + 6153961910 NOT Included with the arm To be ordered	Clamp to be welded	E
ECA 70/90/115/125/150	TRA 100	6158129040 + 6158128980		C
ERAL 4 - 225 ECA 200	TRA200	6158106310 + 6153962300 NOT Included with the arm To be ordered	Clamp to be welded	E



For the tools not mentioned in this list, please ask your local Desoutter contact to define the tool clamp