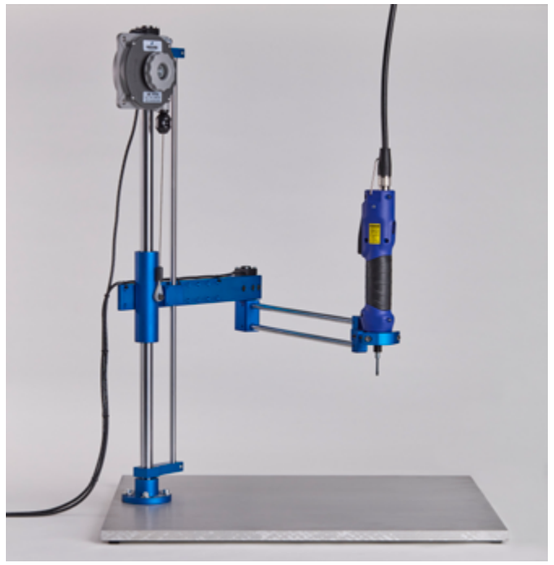


Torque Reaction Arms | Up to 664 lbf-in

Support arms manoeuvre smoothly as they absorb the torque reactions from the screwdrivers providing ergonomic support for the operator. They reduce RMI (Repetitive Motion Injury) and CTS (Carpal Tunnel Syndrome) while boosting production.

Folding and Linear Torque Reaction Arm Series

Torque folding arms have been designed to eliminate the reaction generated by screwdrivers when they stop at the pre-set torque. Options include table or wall mount.

Linear arms keep the tool perpendicular and prevent cross threading and side load. Each model extends in horizontal direction and arm length is adjustable. The fluid movement increases precision and production for a variety of torque applications.

Telescopic Carbon Arm Series

CAR series torque reaction arms eliminate the reaction that screwdrivers generate when they stop at the pre-set torque (up to 443 lbf-in). Their carbon structure makes them extremely lightweight and incredibly resistant at the same time. This means that they resist degradation in high fatigue applications much better than conventional materials.

Suspended Torque Arm Series

SAR Suspended Torque Arms are the ideal solution to increase productivity. They can be easily installed on most workplaces to help the operator handle the screwdriver in total safety and stability while keeping the workspace clear. With minimized reaction force you will also improve finished product quality because there is no movement of the tool and all torque is absorbed in the joint.

Three models available, depending on the motion of the axes.
SAR arms are supplied without tool holder – to be purchased depending on the screwdriver used (see chart on the next page).

Support arm models

PA2KOL Folding Arm

PS7KOL Folding Arm

LINAR and LINART Arms

CAR Telescopic Carbon Arm

SAR XYZ Suspended Arm

SAR XZ

SAR Z

Folding and Linear Torque Reaction Arms

Code	Model	Arm Weight lb	Max Payload lb	Min Reach in	Max Reach in	Max Torque in-lb
010600	PA2KOL	5.5	3.3	17.3	25.2	177
010602	PA7KOL	9.3	22*	19.6	37.4	664
010603	PS7KOL	11.7	22*	11.8	39.4	664
010681	LINAR1	3.3	3.3	7.2	26.2	221
010682	LINAR2	3.3	3.3	7.2	26.2	443
010683	LINART	3.5	3.1	4.5	29.1	221

* Required payload is to be specified with order

Folding and Linear Torque Reaction Arms with Autoadvance Kit

Code	Model	Arm Weight lb	Piston Stroke in	Min Reach in	Max Reach in	Max Torque in-lb
010682/A	LINAR2/A	13.4	0 - 2	7.2	26.2	443
Autoadvance kit						
020099	The Autoadvance kit can be supplied separately – to be installed on LINAR2 and LINART to convert them into /A models.					

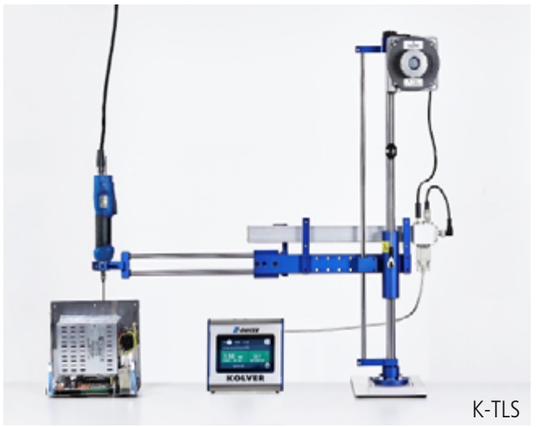
Telescopic Torque Reaction Arms

Code	Model	Arm Weight lb	Max Payload lb	Min Reach in	Max Reach in	Max Torque in-lb
010661	CAR101	0.4	5.9	21.6	35.7	89
010663	CAR281	1.3	5.9	19.3	37.4	221
010664	CAR282	1.5	5.9	28.7	65	221
010665	CAR501	1.4	5.9	19.3	37.4	443
010666	CAR502	1.8	5.9	28.7	65	443

Suspended Torque Arms

Code	Model	Arm weight lb	Max Payload lb	Vertical Z Stroke mm	Horizontal X Stroke mm	Lateral Y Stroke mm	Max Torque in-lb
010690/Z/5	SAR15 Z	2.6	3.4	14.3	-	-	133
010690/XZ/85	SAR15 XZ 85	2.6	3.4	14.3	27.2	-	133
010690/XYZ/855	SAR15 XYZ 855	3.7	2.9	34.8	27.2	14.8	133
Tool holders for SAR arms							
010695	Tool holder for PLUTO and RAF series inline screwdrivers						
010698	Tool holder for FAB, NATO & MITO series inline screwdrivers						
010695/P	Tool holder for right angle PLUTO screwdrivers (up to 133 lbf-in)						
010695/UNI	Universal Tool Holder for any screwdriver (max diameter 1.85 in)						

IMPORTANT: A diameter reduction adapter (code 234545) is required when LINAR and CAR arms are used with PLUTO35 or PLUTO50 screwdrivers (Ø 57 mm).



K-TLS


TLS1

Positioning Arms | Up to 443 lbf-in

K-TLS, the smart positioning system for the K-DUCER!

K-TLS is Kolver's new intelligent positioning system for precision assembly, ensuring that every screw is not only fastened to the correct torque but also in the right position. The key innovation lies in its ability to be fully managed through the K-DUCER, eliminating the need for additional control units for arm positioning. With all the advanced features of the K-DUCER at your disposal, including connectivity and interoperability with MES and PLC systems, K-TLS simplifies the process.

By centralizing control within a single, intuitive interface, K-TLS enhances efficiency and ease of use, making error-proof assembly accessible to all.

Key features

- Plug-and-play connection with the K-DUCER
- Control unit integrated within the K-DUCER
- 24 sequences, 200 programs, and up to 150 screws per program
- High precision with programmable tolerance
- Connectivity with MES or PLC systems
- Real-time position data
- Compatible with CAR, LINAR1, LINAR2, LINART, and SAR XYZ arms
- Use two arms and screwdrivers simultaneously with a single K-DUCER via Dock05.

TLS1 positioning system

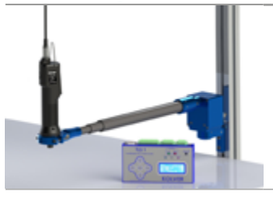
For all of our other screwdrivers, the TLS1 is an intelligent system that error-proofs your assembly ensuring that every screw is in the correct location at the right torque.
The TLS1 control unit, connected to the desired arm and screwdriver controller, allows the user to program assembly sequences and X-Y coordinates for each screw with its integrated keypad.
Fastening programs are automatically selected and enabled from the screwdriver controller based on the TLS1 Arm locations and current sequence step. No PC is required.

Note: if a plug-and-play solution that is integrated directly into the screwdriver controller is needed, we recommend the K-TLS.

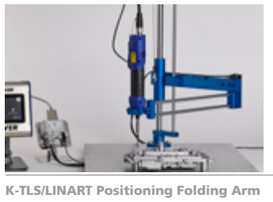
Key features

- 8 programs, and up to 35 screws per program
- Screw position (length/angle) with accuracy: length ±1 mm; angle ±1°.
- Programmable tolerance and manual reset.
- Password protected.
- External keyboard and serial port for easy programming and statistics.
- Compatible with CAR, LINAR1, LINAR2, LINART, and SAR XYZ arms

TLS1 Positioning arm models


TLS1/CAR Positioning Carbon Arm


TLS1/LINAR1 and TLS1/LINAR2


K-TLS/LINART Positioning Folding Arm


TLS1/SAR XYZ Suspended Arm

Folding and Linear Positioning Arms

Code	Model	Max Torque lbf-in	Min Reach in	Max Reach in	Min distance between screws at max extension
010681/K-TLS	LINAR1/K-TLS	221	7.2	26.2	0.24 in
010682/K-TLS	LINAR2/K-TLS	443	7.2	26.2	0.24 in
010683/K-TLS	LINART/K-TLS	221	4.5	29.1	0.28 in
Code	**Model**	**Max Torque lbf-in**	**Min Reach in**	**Max Reach in**	**Min distance between screws at max extension**
010681/TLS1	LINAR1/TLS1	221	7.2	26.2	0.24 in
010682/TLS1	LINAR2/TLS1	443	7.2	26.2	0.24 in
010683/TLS1	LINART/TLS1	221	4.5	29.1	0.28 in

Linear Positioning Arms with Autoadvance Kit

Code	Model	Arm Weight lb	Piston Stroke in	Min Reach in	Max Reach in	Min distance between screws at max ext
010682/K-TLS/A	LINAR2/K-TLS/A	13.4	0 - 2	7.2	26.2	0.24 in
Code	**Model**	**Arm Weight lb**	**Piston Stroke in**	**Min Reach in**	**Max Reach in**	**Min distance between screws at max ext**
010682/TLS1/A	LINAR2/TLS1/A	13.4	0 - 2	7.2	26.2	0.24 in
Autoadvance kit						
020099	Autoadvance kit can be supplied separately.					

Telescopic Positioning Arms

Code	Model	Max Torque lbf-in	Min Reach in	Max Reach in	Min distance between screws at max extension
010663/K-TLS	CAR281/K-TLS	221	19.3	37.4	0.35 in
010664/K-TLS	CAR282/K-TLS	221	28.7	65	0.59 in
010665/K-TLS	CAR501/K-TLS	443	19.3	37.4	0.35 in
010666/K-TLS	CAR502/K-TLS	443	28.7	65	0.59 in
Code	**Model**	**Max Torque lbf-in**	**Min Reach in**	**Max Reach in**	**Min distance between screws at max extension**
010663/TLS1	CAR281/TLS1	221	19.3	37.4	0.35 in
010664/TLS1	CAR282/TLS1	221	28.7	65	0.59 in
010665/TLS1	CAR501/TLS1	443	19.3	37.4	0.35 in
010666/TLS1	CAR502/TLS1	443	28.7	65	0.59 in

Suspended Positioning Arms

Code	Model	Max Torque lbf-in	Arm Weight lb	Vertical Stroke Z in	Vertical Stroke X in	Vertical Stroke Y in
010690/XYZ/K-TLS	SAR15 XYZ/K-TLS	133	17.6	34.8	27.2	14.8
Code	**Model**	**Max Torque lbf-in**	**Arm Weight lb**	**Vertical Stroke Z in**	**Vertical Stroke X in**	**Vertical Stroke Y in**
010690/XYZ/TLS1	SAR15 XYZ/TLS1	133	17.6	34.8	27.2	14.8

Tool holders for SAR arms	
010695	Tool holder for PLUTO and RAF series inline screwdrivers
010698	Tool holder for FAB, NATO & MITO series inline screwdrivers
010695/P	Tool holder for right angle PLUTO screwdrivers (up to 133 lbf-in)
010695/UNI	Universal Tool Holder for any screwdriver (max diametre 1.9 in)

For all of our TLS1 arms, one of the following cables must be specified at time of purchase:	
260003/1	Cable to connect TLS system to EDU1FR/SG controller
260004/1	Cable to connect TLS system to EDU1BL/SG, EDU2AE, EDU2AE/HPro, EDU2AE/TOP or EDU2AE/TOP/TA controller
260004/KDU	Cable to connect TLS system to KDU controller

A diameter reduction adapter (code 234545) is required when LINAR and CAR arms are used with PLUTO35 or PLUTO50 screwdrivers (Ø *2.24 in).*