### **CUSTOMER FEEDBACK:**

At MAN in Salzgitter we are using several pulse tools in very challenging applications where we make high demands on torque, durability and follow-up costs. The types of Cleco pulse tools which I am using in production are meeting these requirements perfectly, both in terms of repeatability, maintenance costs and quality. They work maintenance free until today since placing them into operation 15 months ago.

















## **H-SERIES SPECIFICATIONS**

	MODEL NUMBER	DRIVE TYPE	TORQUE RANGE FREE SPEE	FREE SPEED	WEIGHT	SIDE TO CENTER	AIR CONSUMPTION			
			Nm	RPM	kg	mm	NPT	Hose I.D. Free Speed m³/min		
	H-SERIES   PISTO	OL GRIP   SHUT-OFF	MODELS							
	7PTHH352	1/4" Sq.Dr.	4-7	3500	0,79	21	1/4"	3/8"	0,1	0,25
	7PTHH35Q	1/4" QC	4-7	3500	0,79	21	1/4"	3/8"	0,1	0,25
	11PTHH352	1/4" Sq.Dr.	6-11	3500	0,82	21	1/4"	3/8"	0,15	0,3
	11PTHH35Q	1/4" QC	6-11	3500	0,85	21	1/4"	3/8"	0,15	0,3
	11PTHH353*	3/8" Sq.Dr.	6-11	3500	0,83	21	1/4"	3/8"	0,15	0,3
	20PTHH40Q	1/4" QC	10-20	4000	0,87	21	1/4"	3/8"	0,15	0,3
	20PTHH403*	3/8" Sq.Dr.	10-20	4000	0,86	21	1/4"	3/8"	0,15	0,3
-	35PTHH40Q	1/4" QC	20-35	4000	1,05	24	1/4"	3/8"	0,2	0,4
	35PTHH403*	3/8" Sq.Dr.	20-35	4000	1,05	24	1/4"	3/8"	0,2	0,4
	55PTHH403*	3/8" Sq.Dr.	30-55	4000	1,15	24	1/4"	3/8"	0,3	0,6
	80PTHH35Q	7/16" QC	50-80	3500	1,45	28,5	1/4"	3/8"	0,3	0,6
	80PTHH354	1/2" Sq.Dr.	50-80	3500	1,40	28,5	1/4"	3/8"	0,3	0,6
	110PTHH30Q	7/16" QC	75-110	3000	1,70	28,5	1/4"	1/2"	0,4	0,8
	120PTHH304	1/2" Sq.Dr.	75-120	3000	1,70	28,5	1/4"	1/2"	0,4	0,8
					0	To all a sufamos a		0		

PTHHA = Add "A" after "HH" in model number to denote Top Air Inlet option when ordering. (\*) 7/16" Quick Change Chuck available separately as an accessory.

**General:** Tool performance rated at 6 bar air pressure. **Standard Equipment:** Suspension bail and torque adjusting wrench. Torque signal port (pistol grip models only).



		TORQUE RANGE	FREE SPEED	WEIGHT	SIDE TO	AIR CONSUMPTION			
MODEL NUMBER	DRIVE TYPE	Nm	RPM	kg	CENTER mm	NPT	Hose I.D.	Free Speed m³/min	Load m³/min
H-SERIES   PISTOL GRIP   NON-SHUT-OFF MODELS									
7PHH602	1/4" Sq.Dr.	4-7	6000	0,77	21	1/4"	3/8"	0,3	0,25
7PHH60Q	1/4" QC	4-7	6000	0,79	21	1/4"	3/8"	0,3	0,25
11PHH653*	3/8" Sq.Dr.	6-11	6500	0,79	21	1/4"	3/8"	0,35	0,3
11PHH652	1/4" Sq.Dr.	6-11	6500	0,78	21	1/4"	3/8"	0,35	0,3
11PHH65Q	1/4" QC	6-11	6500	0,80	21	1/4"	3/8"	0,35	0,3
20PHH753*	3/8" Sq.Dr.	10-20	7500	0,84	21	1/4"	3/8"	0,4	0,3
20PHH75Q	1/4" QC	10-20	7500	0,86	21	1/4"	3/8"	0,4	0,3
35PHH653*	3/8" Sq.Dr.	20-35	6500	1,02	24	1/4"	3/8"	0,55	0,4
35PHH65Q	1/4" QC	20-35	6500	1,03	24	1/4"	3/8"	0,55	0,4
55PHH603*	3/8" Sq.Dr.	30-55	6000	1,12	24	1/4"	3/8"	0,75	0,6
80PHH604	1/2" Sq.Dr.	50-80	6000	1,40	28,5	1/4"	3/8"	0,7	0,6
80PHH60Q	7/16" QC	50-80	6000	1,41	28,5	1/4"	3/8"	0,7	0,6
110PHH55Q	7/16" QC	75-110	5500	1,66	28,5	1/4"	1/2"	0,9	0,8
120PHH554	1/2" Sq.Dr.	75-120	5500	1,65	28,5	1/4"	1/2"	0,9	0,8

PHHA = Add "A" after "HH" in model number to denote Top Air Inlet option when ordering. (\*) 7/16" Quick Change Chuck available separately as an accessory.

General: Tool performance rated at 6 bar air pressure.



MODEL NUMBER	DESCRIPTION		
ACCESSORIES			
931041	H-Series 7PTH-120PTH (One Piece Rubber Tool Stand)		
934918	Signal-Kit for torque verifier TVP110		
935472	7/16" Quick-Change Chuck for 11/20/35/55PTHH/PTHHA/PHH/PHHA		
935965	Vibration absorber for 35/55PTHHA/PHHA		
935966	Vibration absorber for 80/110/120PTHHA/PHHA		
928483	Filler Unit		
935718	Connector (Angle)		
36695PT	Reserve Oil Filling Set (Syringe and Distancer)		
539317	Hydraulic Oil (One Quart)		
TVP-110-30-D (230V)*	Torque verifier; 2,72kg; W x H x D 222 x 232 x 105mm		
* = Power cable, air signal-transducer, one 8m-cable for connection with air signal-transducer			

936695PT as well as one 2,3m-air hose for connection with transducer at the tool are included in delivery.

NOTICE: Tool has to be equipped with a Signal-Kit for TVP-110.



	PROTECTIVE COVERS					
	937442PT	7/11/20PTHHA/7/11/20PHHA	937447PT	7/11/20PTHH/7/11/20PH		
	937443PT	35PTHHA/35PHHA	937448PT	35PTHH/35PHH		
	937444PT	55PTHHA/55PHHA	937449PT	55PTHH/55PHH		
(S)	937445PT	80PTHHA/80PHHA	937450PT	80PTHH/80PHH		
3 Filler Unit	937446PT	110/120PTHHA/110/120PHHA	937451PT	110/120PTHH/110/120P		
ormer ome						

### MODEL NUMBER PULSE REPAIR MOTOR REPAIR MAINTENANCE AND SERVICE KITS

110/120 PHH/PTHH	936035PT	
7/11/20 PHH/PTHH	936210	
35/55 PHH/PTHH	936211	
80 PHH/PTHH	936212	
7/11/20 PHH		936158
35 PHH		936168
55 PHH		936169
80 PHH		936178
110/120 PHH		936179
7 PTHH		936251PT
35 PTHH		936252PT
80 PTHH		936253PT
55 PTHH		936281PT
110/120 PTHH		936282PT
11 PTHH		936283PT
20 PTHH		936284PT











DEL NUMBER DESCRIPTION SHUT-OFF MODEL NUMBER DESCRIPTION NON-SHUT-OFF

# Ceco® H-SERIES PULSE TOOLS

## DURABLE. ECONOMICAL. LOW MAINTENANCE.

We are constantly improving our products to guarantee you optimum productivity.

The Cleco H-Series combines legendary durability with unmatched repeatability so you will be able to complete every joint quickly and reliably.

Due to the excellent power-weight ratio, you will not want to put it down again.



With 54 models of shut-off and non-shut-off pulse tools to choose from, you are sure to find just the right Cleco Pulse Tool for the job.



#### **Outstanding Ergonomics** —

Leading motor design combined with new body development provides exceptional biotechnology. Less vibrations allow for greater operator comfort.



#### Powerful and Efficient 3-Chamber Air Motor -

With speed governor and oilless blades. Reduces tightening time with increased torque. Unique design reduces blade wear and lowers total cost of ownership.







Delivers market-leading repeatability for hard and soft joints.

Completely Re-Engineered Pulse Unit

NEW Reduced Tool Maintenance

Double-chambered pulse unit with built-in

before the first service.

automatic oil reserve. Up to 500.000 cycles



**Drive Spindle Bearing** 



#### 50% Lower Air Consumption @ Free-Speed -

Innovative centrifugal speed control does not release the entire capacity before run down has ended. Enables operation to as low as 4 bar. Lower air consumption drives lower cost of ownership.





- Anti-Wobble Socket



**Bearing Support** 



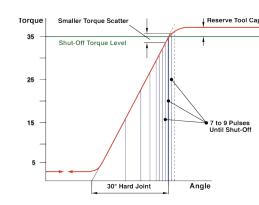
#### **Easy Torque Set-Up** Simply insert hex into







Mechanism ranges close to electric tool characteristics at a tolerance of +/- 10% at Six Sigma.



**Hard Joint Reference** 



#### **Ships Ready for Error-Proofing**

Works with existing TVP torque verifier. Port located near air inlet to maximize ergonomics.







**Standard Air Signal-Indicating Tool Shut-Off** for use with Cleco TVP Error-Proofing System





#### Easily Adjustable Motor Speed -

Ensures accuracy on hard joints. Can be locked into place to prevent accidental modification.