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.



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		TESTS.
/	GENERAL INDUSTRY	AGRIC























H-SERIES SPECIFICATIONS



		TORQUE RANGE	FREE SPEED	WEIGHT	SIDE TO CENTER		AIR CON	SUMPTION	
MODEL NUMBER	DRIVE TYPE	Nm	RPM	kg	mm	NPT	Hose I.D.	Free Speed m³/min	Load 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
				O	T1		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	MM	NPT	Hose I.D.	Free Speed m³/min	Load m³/min
H-SERIES PIST	OL GRIP NON-SHI	JT-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. **Standard Equipment:** Suspension bail





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)
936695PT	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
	ransducer, one 8m-cable for connection with air signal-transducer

EL NUMBER | DESCRIPTION SHUT-OFF | MODEL NUMBER | DESCRIPTION NON-SHUT-OF

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 COVE	RS		
		937442PT	7/11/20PTHHA/7/11/20PHHA	937447PT	7/11/20PTHH/7/11/20PHH
i		937443PT	35PTHHA/35PHHA	937448PT	35PTHH/35PHH
	-	937444PT	55PTHHA/55PHHA	937449PT	55PTHH/55PHH
2	No.	937445PT	80PTHHA/80PHHA	937450PT	80PTHH/80PHH
Fi	ller Unit	937446PT	110/120PTHHA/110/120PHHA	937451PT	110/120PTHH/110/120PHH
• •	nor onne				

MAINTENANCE AND SE		
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
20 PTHH		936284PT

NODEL NUMBER | PULSE REPAIR MOTOR REPAIR





Cleco®







Cleco 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.



8-Chamber Motor Housing



NEW Reduced Tool Maintenance

Double-chambered pulse unit with built-in automatic oil reserve. Up to 500.000 cycles before the first service.



- Completely Re-Engineered Pulse Unit

Delivers market-leading repeatability for hard and soft joints.





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.



Automatically
 Activated Expansion
 Chamber

- Anti-Wobble Socket

Drive Spindle
Bearing Support



Easy Torque Set-Up

Simply insert hex into rear port of tool.



Ships Ready for Error-Proofing

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



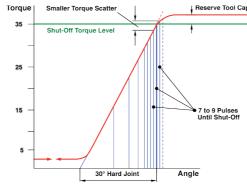






High-Precision Shut-Off

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











Easily Adjustable Motor Speed

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

