

# TCR Air Powered Hoists with Pendant and Cord Controls and Hook Suspension

Harrington's TCR Series air hoists offer the benefit of lifting heavier loads while maintaining low headroom and a continuous duty cycle. These hoists are best suited for use in foundries, assembly lines, construction sites and many other demanding applications.

#### **Features and Benefits**

#### **Unlimited Duty Cycle**

For continuous operation

#### Spring-Loaded Multi-Vane Motor Design

Permits very fine feathering control

#### **High Strength Cast Iron Housing**

Proven weather resistant and durable in harsh environments

#### **Airtight Hoist**

Results in efficient use of air

#### **Comfortable Noise Levels**

External muffler reduces noise level to 80dBA @ 1 yd. with no load

#### **Heavy Duty Self-Adjusting Brake**

For precise braking action

#### Standard Upper & Lower Limit Stops

Prevents over-travel of hook in either direction

#### **Overload Limiter**

Adjustable load limiter detects overload automatically and blocks air flow for lifting

#### Wear Resistant Load Chain

Grade 80, case-hardened for superior strength

#### **Capacity Range**

Standard Hoist Specifications

1/4 - 2 Ton (see page 14 for 10 - 25 Ton)

#### Standard Lift

10' (longer lifts available)

#### **Standard Pendant or Cord Length**

Hangs approximately 4' above the hoist's fully extended bottom hook (longer lengths available)

#### **Air Supply Requirement**

48 - 90 cfm at 60 - 90 psi

#### **Air Lubrication Requirement**

Minimum 10 to 15 drops of oil per minute (0.2 – 0.3 cc/min.)

#### Air Filtration

Maximum 5 micron air filter or finer required

#### **Air Inlet Port**

1/2" NPT

#### Air Supply Hose Minimum Size

1/4 - 2 Tons - 1/2"

#### **Operating Conditions**

Temperature range +14° to 140°F Humidity 85% or less

#### **Chain Containers**

Optional Canvas or Steel







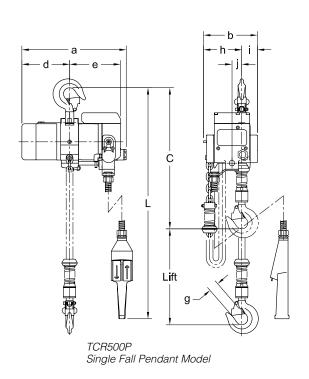
# TCR Air Powered Hoists with Pendant and Cord Controls and Hook Suspension

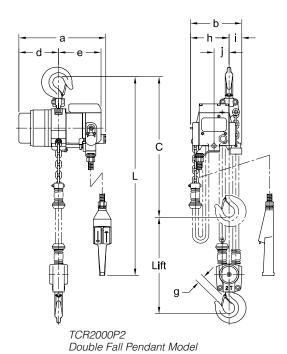
## PENDANT MODEL—SPECIFICATIONS

		Ctondord	Push Button		n Speeds 9 90 psi)	Air Consum	Down option Rates in @ 90 psi)	Load Chain Diameter (mm)	Nat	Weight for Additional
Cap. (Tons)	Product Code	Standard Lift (ft)	Hose L (ft)	No Load	Full Load	No Load	Full Load	Chain Fall Lines	Net Weight (lbs)	One Foot of Lift (Ibs)
1/4	TCR250P		7.5	68 / 44	52 / 51	63 / 49	48 / 57	6.3 x 1	68	0.6
1/2	TCR500P		7.5	68 / 44	37 / 57	63 / 49	48 / 57	6.3 x 1	68	0.6
1	TCR1000P2	10	7.5	34 / 22	19 / 29	63 / 49	48 / 57	6.3 x 2	78	1.2
1	TCR1000P	7.5	7.5	37 / 22	21 / 33	62 / 53	53 / 60	7.1 x 1	77	0.8
2	TCR2000P2	7.5	19 / 11	11 / 16	62 / 53	53 / 60	7.1 x 2	88	1.5	

# PENDANT MODEL—DIMENSIONS

Cap. (Tons)	Product Code	Headroom C (in)	a (in)	b (in)	d (in)	e (in)	g (in)	h (in)	i (in)	j (in)
1/4	TCR250P	18.2	13.5	6.9	6.1	6.6	1.2	4.9	2.0	1.3
1/2	TCR500P	18.2	13.5	6.9	6.1	6.6	1.2	4.9	2.0	1.3
1	TCR1000P2	20.4	13.5	7.7	6.1	6.6	1.2	5.9	1.9	2.2
1	TCR1000P	18.3	13.5	6.9	6.1	6.6	1.2	4.9	2.0	1.3
2	TCR2000P2	21.8	13.5	8.0	6.1	6.6	1.2	6.0	2.0	2.3





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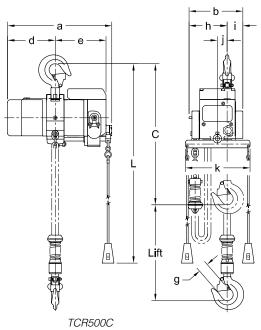
Lift

## CORD MODEL—SPECIFICATIONS

		Chandand	Coud	Up/Down Speeds (ft/min @ 90 psi)		Air Consum	Down Iption Rates in @ 90 psi)	Load Chain Diameter (mm)	Nat	Weight for Additional
Cap. (Tons)	Product Code	Standard Lift (ft)	Cord L (ft)	No Load	Full Load	No Load	Full Load	Chain Fall Lines	Net Weight (lbs)	One Foot of Lift (Ibs)
1/4	TCR250C		7.5	68 / 44	52 / 51	63 / 49	48 / 57	6.3 x 1	66	0.6
1/2	TCR500C		7.5	68 / 44	37 / 57	63 / 49	48 / 57	6.3 x 1	66	0.6
1	TCR1000C2	10	7.5	34 / 22	19 / 29	63 / 49	48 / 57	6.3 x 2	76	1.2
1	TCR1000C	7.5	7.5	37 / 22	21/33	62 / 53	53 / 60	7.1 x 1	75	0.8
2	TCR2000C2		7.5	19 / 11	11 / 16	62 / 53	53 / 60	7.1 x 2	86	1.5

# CORD MODEL — DIMENSIONS

Cap. (Tons)	Product Code	Headroom C (in)	a (in)	b (in)	d (in)	e (in)	g (in)	h (in)	i (in)	j (in)	k (in)
1/4	TCR250C	18.2	13.5	6.9	6.1	6.6	1.2	4.9	2.0	1.3	8.3
1/2	TCR500C	18.2	13.5	6.9	6.1	6.6	1.2	4.9	2.0	1.3	8.3
1	TCR1000C2	20.4	13.5	7.7	6.1	6.6	1.2	5.9	1.9	2.2	8.3
1	TCR1000C	18.3	13.5	6.9	6.1	6.6	1.2	4.9	2.0	1.3	8.3
2	TCR2000C2	21.8	13.5	8.0	6.1	6.6	1.2	6.0	2.0	2.3	8.3



TCR500C Single Fall Cord Model

TCR2000C2
Double Fall Cord Model



# TCR Air Powered Hoists with Air Powered, Push and Geared Trolleys

Harrington's TCR hoists will couple with our air powered, push or geared trolleys for added mobility. The MCR air powered trolley is the ideal choice for transporting medium to heavy loads in construction and foundry applications. The economical PT or GT manual trolleys are perfect for lighter, infrequent moves and in small workshops.

Refer to page 4 for standard hoist specifications.

#### **Features and Benefits**

#### **Air Powered Trolleys**

#### **Unlimited Duty Cycle**

For continuous operation

#### **Spring-Loaded Multi-Vane Motor Design**

Permits smooth operation and controlled travel

#### **High Strength Cast Iron Housing**

Proven weather resistant and durable in harsh environments

#### **Internal Disc Brake**

Protected from harsh environments

#### **Drop Stops & Rubber Bumpers**

To ensure safe operation

#### Side Guide Rollers

Provide additional stability and smooth travel

#### Versatile Wheels

Fit flat or tapered beam flange

#### **Trolley Muffler**

Produces low noise levels

#### **Manual Trolleys**

#### **Shafts**

Standard shafts fit wide range of beams Longer shafts available for larger beams Spacers for easy adjustments

#### Wheels

All steel Sealed ball bearings Fit flat or tapered beam flange

#### **Standard Hoist Specifications**

#### Air Powered Trolleys

**Capacity Range** 

1/4 - 2 Ton

#### **Control Option on Trolley/Hoist**

Pendant control only

#### Standard Pendant Length

Hangs approximately 4' above the hoist's fully extended bottom hook (longer lengths available — maximum 30')

#### Air Supply Requirement

53 cfm at 60 - 90 psi

#### **Air Lubrication Requirement**

Minimum 10 to 15 drops of oil per minute (0.2 – 0.3 cc/min.)

#### Air Filtration

Maximum 5 micron air filter or finer required

#### Air Inlet Port

3/4" NPT

#### Air Supply Hose Minimum Size

1/4 - 2 Tons - 1/2"

#### **Operating Conditions**

Temperature range +14° to 140°F Humidity 85% or less

#### **Manual Trolleys**

#### Capacity Range

1/4 - 2 Ton

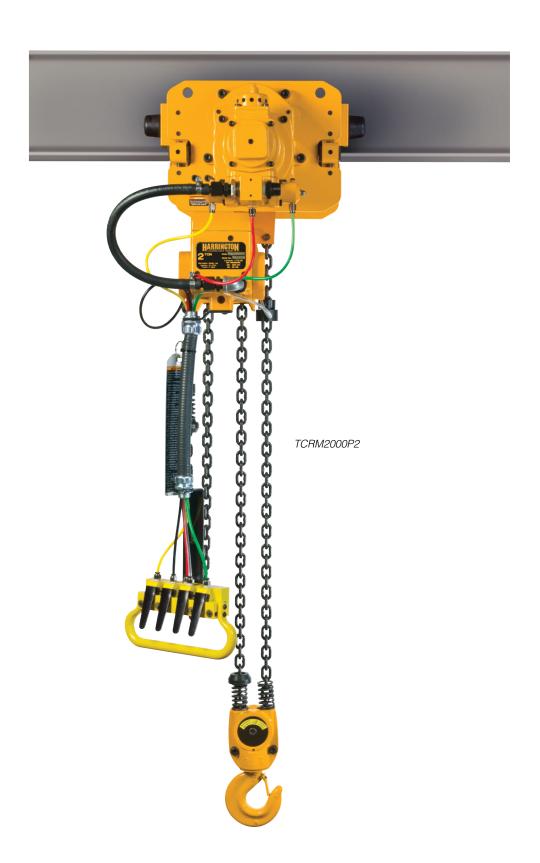
#### **Control Option on Hoist**

TCRP and TCRG - Pendant and cord

#### Standard Hand Chain Length

On geared trolleys
Hangs approximately 2' less than
fully extended bottom hook
(longer lengths available)







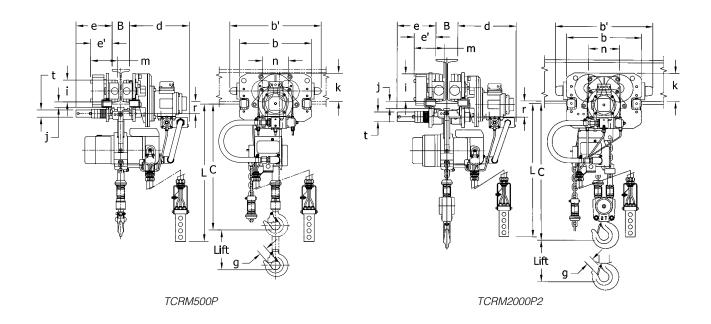
# TCR Air Powered Hoists with Air Powered, Push and Geared Trolleys

# PENDANT MODEL WITH AIR POWERED TROLLEY—SPECIFICATIONS

			Push	Up/Dow	n Speeds			Up/Down nsumption fm @ 90 ps		Flange	Minimum Allow.	Load Chain Diameter		Weight for	
		Standard	Button Hose	(ft/min @	(ft/min @ 90 psi)			CR	MCR	Width Adjustability	Radius for	(mm) x	Net	Additional One Foot	
Cap. (Tons)	Product Code	Lift (ft)	L (ft)	No Load	Full Load	Speed (ft/min)		Full Load	No Load Full Load	B (in)	Curve (in)	Chain Fall Lines	Weight (lbs)	of Lift (lbs)	
1/4	TCRM250P			68 / 44	52 / 51		63 / 49	48 / 57	53			6.3 x 1	170	0.6	
1/2	TCRM500P			68 / 44	37 / 57	,	63 / 49	48 / 57	53	0.00 +- 5.00	107.0	6.3 x 1	170	0.6	
1	TCRM1000P2	10	7.4	34 / 22	19 / 29	65	63 / 49	48 / 57	53	2.28 to 5.00	137.8	6.3 x 2	183	1.2	
1	TCRM1000P			37 / 22	7/22 21/33		62 / 53	53/60	53			7.1 x 1	209	0.8	
2	TCRM2000P2			18.5 / 11 11 /	11 / 16		62 / 53	53/60	53	3.94 to 6.02	51.2	7.1 x 2	254	1.5	

## PENDANT MODEL WITH AIR POWERED TROLLEYS—DIMENSIONS

Cap. (Tons)	Product Code	Headroom C (in)	b (in)	b' (in)	d (in)	e (in)	e' (in)	g (in)	i (in)	j (in)	k (in)	m (in)	n (in)	r (in)	t (in)
1/4	TCRM250P	19.3	12.4	15.6	10.3	6.2	3.7	1.2	3.7	0.9	4.8	4.6	4.4	2.0	1.2
1/2	TCRM500P	19.3	12.4	15.6	10.3	6.2	3.7	1.2	3.7	0.9	4.8	4.6	4.4	2.0	1.2
1	TCRM1000P2	21.5	12.4	15.6	10.3	6.2	3.7	1.2	3.7	0.9	4.8	4.6	4.4	2.0	1.2
1	TCRM1000P	19.5	12.4	15.6	10.3	6.2	3.7	1.2	3.7	0.9	4.8	4.6	4.4	2.0	1.2
2	TCRM2000P2	23.3	13.4	17.4	10.5	6.9	3.9	1.2	4.9	1.3	5.0	5.1	5.5	2.8	1.7



# PENDANT MODEL WITH PUSH OR GEARED TROLLEY—SPECIFICATIONS

		Standard	Push Button Hose		vn Speeds @ 90 psi)	Air Consu	'Down nption Rates nin @ 90 psi)	(	n Adjustability B in)	Minimum* Allow. Radius for	Load Chain Diameter (mm) x	Net	Weight for Additional One Foot
Cap. (Tons)	Product Code	Lift (ft)	(ft)	No Load	Full Load	No Load	Full Load	Standard	Optional	Curve (in)	Chain Fall Lines	Weight (lbs)	of Lift (lbs)
1/4	TCRP(TCRG)250P		7.5	68 / 44	52 / 51	63 / 49	48 / 57	2.28 to 4.00	4.01 to 8.00 (5.01 to 8.00)	13.8	6.3 x 1	76 (96)	0.6 (1.2)
1/2	TCRP(TCRG)500P		7.5	68/44	37 / 57	63 / 49	48 / 57	(2.28 to 5.00)		(51.2)	6.3 x 1	76 (96)	0.6 (1.2)
1	TCRP(TCRG)1000P2	10	7.5	34/22	19 / 29	63 / 49	48/57	2.28 to 5.00	5.01 to 8.00 OR	17.7	6.3 x 2	94 (108)	1.2 (1.8)
1	TCRP(TCRG)1000P		7.5	37 / 22	21/33	62 / 53	53 / 60	2.20 (0 5.00	8.01 to 12.00	(51.2)	7.1 x 1	91 (105)	0.8 (1.4)
2	TCRP(TCRG)2000P2		7.5	19 / 11	11 / 16	62/53	53 / 60	3.23 to 6.02	6.03 to 12.00	21.7 (59.1)	7.1 x 2	113 (130)	1.5 (2.1)

Figures in parenthesis are data for geared trolley

### CORD MODEL WITH PUSH OR GEARED TROLLEY—SPECIFICATIONS

		Chandand	04			Air Consu	/Down mption Rates	(	ge Width Adjustability B (in)		В		Load Chain Diameter (mm)	Nat	Weight for Additional
Cap.	Product	Standard Lift	L		@ 90 psi) Full Load	(cubic ft/n	nin @ 90 psi) Full Load	{	Ontional	for Curve	Chain Fall	Net Weight	One Foot of Lift		
(Tons)	Code	(ft)	(ft)	No Load	Full Luau	NU LUAU	Full Luau	Standard	Optional	(in)	Lines	(lbs)	(lbs)		
1/4	TCRP(TCRG)250C		7.5	68 / 44	52 / 51	63 / 49	48 / 57	2.28 to 4.00	4.01 to 8.00 (5.01 to 8.00)	13.8	6.3 x 1	74 (94)	0.6 (1.2)		
1/2	TCRP(TCRG)500C		7.5	68 / 44	37 / 57	63 / 49	48 / 57	(2.28 to 5.00)		(51.2)	6.3 x 1	73 (94)	0.6 (1.2)		
1	TCRP(TCRG)1000C2	10	7.5	34 / 22	19 / 29	63 / 49	48 / 57	2.28 to 5.00	5.01 to 8.00 OR	17.7	6.3 x 2	91 (106)	1.2 (1.8)		
1	TCRP(TCRG)1000C		7.5	37 / 22	21/33	62 / 53	53 / 60	2.20 10 5.00	8.01 to 12.00	(51.2)	7.1 x 1	89 (103)	0.8 (1.4)		
2	TCRP(TCRG)2000C2		7.5	19 / 11	11 / 16	62 / 53	53 / 60	3.23 to 6.02	6.03 to 12.00	21.7 (59.1)	7.1 x 2	111 (128)	1.5 (2.1)		

Figures in parenthesis are data for geared trolley

<sup>\*</sup>Minimum flange width for curved beam: 1 Ton Push and 1/8 to 1Ton Geared = 2.87 in.

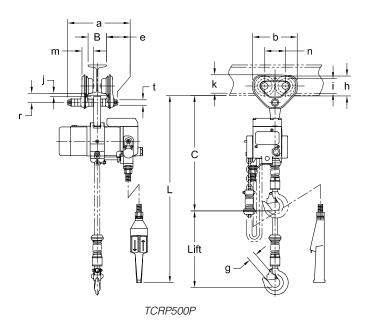
<sup>\*</sup>Minimum flange width for curved beam: 1 Ton Push and 1/8 to 1Ton Geared = 2.87 in.

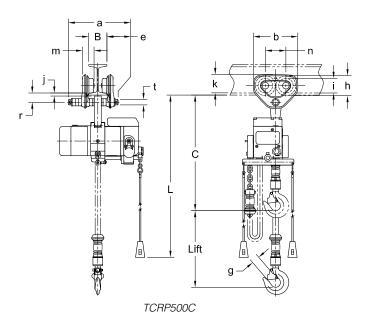


# TCR Air Powered Hoists with Air Powered, Push and Geared Trolleys

# PENDANT AND CORD MODEL WITH PUSH TROLLEY—DIMENSIONS

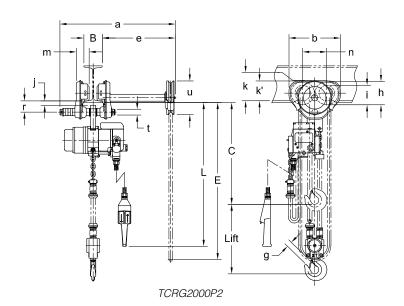
Cap. (Tons)	Product Code	Headroom C (in)	a (in)	b (in)	e (in)	g (in)	h (in)	i (in)	j (in)	k (in)	m (in)	n (in)	r (in)	t (in)
1/4	TCRP250C/P	18.6	8.0	7.2	1.8	1.1	3.2	2.36	0.5	3.0	1.9	3.3	1.5	0.87
1/2	TCRP500C/P	18.6	8.0	7.2	1.8	1.1	3.2	2.36	0.5	3.0	1.9	3.3	1.5	0.87
1	TCRP1000C2/P2	21.3	9.8	9.3	2.2	1.1	4.2	2.80	0.9	3.7	2.2	4.4	2.0	0.98
1	TCRP1000C/P	19.2	9.8	9.3	2.2	1.1	4.2	2.80	1.0	3.7	2.2	4.4	2.0	0.98
2	TCRP2000C2/P2	21.9	11.8	11.0	2.7	1.1	5.0	3.35	1.0	4.4	2.8	5.2	2.4	1.26

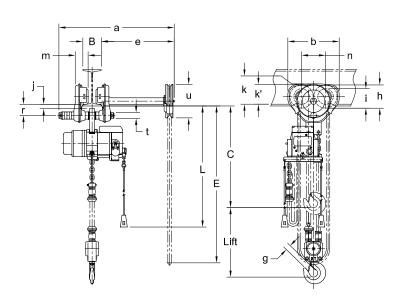




# PENDANT AND CORD MODEL WITH GEARED TROLLEY—DIMENSIONS

Cap. (Tons)	Product Code	Headroom C (in)	E (ft)	a (in)	b (in)	e (in)	g (in)	h (in)	i (in)	j (in)	k (in)	k' (in)	m (in)	n (in)	r (in)	t (in)	u (in)
1/4	TCRG250C/P	19.0	10.5	20.9	9.3	13.3	1.1	4.2	2.80	1.0	3.7	4.2	2.2	4.4	2.0	0.98	7.2
1/2	TCRG500C/P	19.0	10.5	20.9	9.3	13.3	1.1	4.2	2.80	1.0	3.7	4.2	2.2	4.4	2.0	0.98	7.2
1	TCRG1000C2/P2	21.3	10.5	20.9	9.3	13.3	1.1	4.2	2.80	0.9	3.7	4.2	2.2	4.4	2.0	0.98	7.2
1	TCRG1000C/P	19.2	10.5	20.9	9.3	13.3	1.1	4.2	2.80	1.0	3.7	4.2	2.2	4.4	2.0	0.98	7.2
2	TCRG2000C2/P2	21.9	10.5	24.8	11.0	13.3	1.1	5.0	3.35	1.0	4.4	4.3	2.8	5.2	2.4	1.26	7.2





TCRG2000C2