

# 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

#### **Built-in Load Limiter**

Pre-set to stop lifting when load is over rated capacity Adjustable

#### **Wear Resistant Load Chain**

Grade 80, case-hardened for superior strength

#### **Standard Hoist Specifications**

#### **Capacity Range**

1/4 - 6 Ton (see page 24 for 10 - 25 Ton)

#### Standard Lift

(longer lifts available)

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

4' less than lift (longer lengths available)

#### **Air Supply Requirement**

48 - 90 cfm at 60 - 90 psi

#### Air Lubrication

Minimum 10 to 15 drops of oil per minute (2 – 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" 3 - 6 Tons — 3/4"

#### **Operating Conditions**

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

#### **Chain Containers**

Optional Canvas or Steel





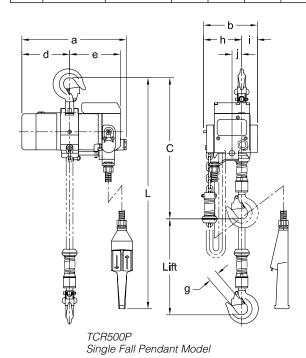
# TCR Air Powered Hoists with Pendant and Cord Controls and Hook Suspension

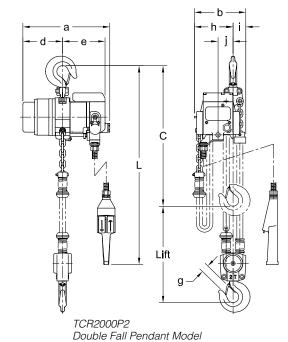
## PENDANT MODEL—SPECIFICATIONS

		Observational	Push Button	Up/Dowi	n Speeds 9 90 psi)	Air Consum	Down ption Rates in @ 90 psi)	Load Chain Diameter (mm)	Mad	Weight for Additional
Cap. (Tons)	Product Code	Standard Lift (ft)	Hose L (ft)	No Load	Full Load	No Load	Full Load	X Chain Fall Lines	Net Weight (lbs)	One Foot of Lift (lbs)
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		7.5	34 / 22	19 / 29	63 / 49	48 / 57	6.3 x 2	78	1.2
1	TCR1000P	10	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
3	TCR3000P		8.0	18 / 11	10 / 15	90 / 65	71 / 74	11.2 x 1	152	2.0
6	TCR6000P2		8.0	9/5	5/7	90 / 65	71 / 74	11.2 x 2	198	4.0

### 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
3	TCR3000P	22.2	17.7	8.9	8.0	9.0	1.3	1.9	6.9	1.7
6	TCR6000P2	26.5	17.7	11.1	8.0	9.0	1.7	2.5	8.7	3.4



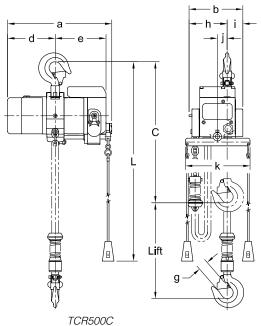


## CORD MODEL - SPECIFICATIONS

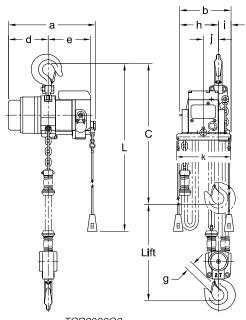
		Chandard	Coud	Up/Dowi	n Speeds 9 90 psi)		lown ption Rates n @ 90 psi)	Load Chain Diameter (mm)	Net	Weight for Additional
Cap. (Tons)	Product Code	Standard Lift (ft)	Cord L (ft)	No Load	Full Load	No Load	Full Load	X Chain Fall Lines	Net Weight (lbs)	One Foot of Lift (lbs)
1/4	TCR250C		7.5	68 / 44	52 / 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		7.5	34 / 22	19 / 29	63 / 49	48 / 57	6.3 x 2	76	1.2
1	TCR1000C	10	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
3	TCR3000C		8.0	18 / 11	10 / 15	90 / 65	71 / 74	11.2 x 1	150	2.0
6	TCR6000C2		8.0	9/5	5/7	90 / 65	71 / 74	11.2 x 2	196	4.0

# 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
3	TCR3000C	22.2	17.7	8.9	8.0	9.0	1.3	1.9	6.9	1.7	8.3
6	TCR6000C2	26.5	17.7	11.1	8.0	9.0	1.7	2.5	8.7	3.4	8.3



TCR500C Single Fall Cord Model



TCR2000C2 Double Fall Cord Model



# TCRM, TCRP and TCRG 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 14 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 - 6 Ton

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

Pendant control only

#### **Standard Pendant Length**

4' less than lift (longer lengths available — maximum 30')

#### **Air Supply Requirement**

53 cfm at 60 - 90 psi

#### **Air Lubrication**

Minimum 10 to 15 drops of oil per minute (2 – 3cc/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" 3 - 6 Tons — 3/4"

#### **Operating Conditions**

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

#### **Manual Trolleys**

#### **Capacity Range**

1/4 – 6 Ton

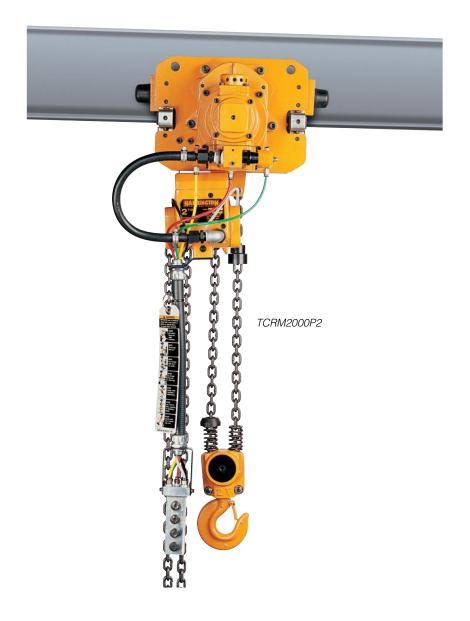
#### **Control Option on Hoist**

TCRP and TCRG —Pendant and cord

#### Standard Hand Chain Length

On geared trolleys 2' less than lift (longer lengths available)







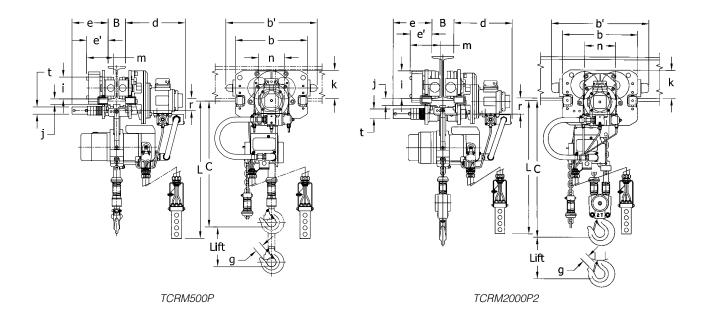
# TCRM, TCRP and TCRG Air Powered Hoists with Air Powered, Push and Geared Trolleys

#### PENDANT MODEL WITH AIR POWERED TROLLEYS—SPECIFICATIONS

		Ctondord	Push Button		n Speeds @ 90 psi)	Tuananaina	(c	Up/Down nsumption fm @ 90 ps CR		Flange Width	Minimum Allow. Radius	Load Chain Diameter (mm)	Net	Weight for Additional
Cap. (Tons)	Product Code	Standard Lift (ft)	Hose L (ft)	No Load	Full Load	Traversing Speed (ft/min)		Full Load	No Load Full Load	Adjustability B (in)	for Curve (in)	Chain Fall Lines	Net Weight (lbs)	One Foot 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	2.28 to 5.00	137.8	6.3 x 1	170	0.6
1	TCRM1000P2			34 / 22	19 / 29		63 / 49	48 / 57	53	2.20 10 3.00	137.0	6.3 x 2	183	1.2
1	TCRM1000P	10	7.4	37 / 22	21 / 33	65	62 / 53	53/60	53			7.1 x 1	209	0.8
2	TCRM2000P2			18.5 / 11	11 / 16		62 / 53	53/60	53	2.04+0.6.00	E1 0	7.1 x 2	254	1.5
3	TCRM3000P			18 / 11	10 / 15		90/65	71 / 74	53	3.94 to 6.02	51.2	11.2 x 1	254	2.0
6	TCRM6000P2			9/5	5/7		90/65	71 / 74	53	4.92 to 7.02	78.7	11.2 x 2	364	4.0

# 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
3	TCRM3000P	21.8	13.4	17.4	10.5	6.9	3.9	1.3	4.9	1.4	5.0	5.1	5.5	2.8	1.7
6	TCRM6000P2	25.9	15.7	19.8	10.8	8.1	4.3	1.7	5.5	1.4	5.5	5.7	6.1	3.9	2.3



### PENDANT MODEL WITH PUSH OR GEARED TROLLEYS—SPECIFICATIONS

		Ctondond	Push Button		vn Speeds	Air Consu	'Down nption Rates	(	h Adjustability B in)	Minimum* Allow. Radius	Load Chain Diameter (mm)	Net	Weight for Additional
Cap.	Product	Standard Lift	L	• •	@ 90 psi)	,	nin @ 90 psi)	1		for Curve	Chain Fall	Net Weight	One Foot of Lift
(Tons)	Code	(ft)	(ft)	No Load	Full Load	No Load	Full Load	Standard	Optional	(in)	Lines	(lbs)	(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		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	10	7.5	37 / 22	21 / 33	62 / 53	53 / 60	2.20 10 3.00	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	2.02 to 0.00	C 00 to 10 00	21.7 (59.1)	7.1 x 2	113 (130)	1.5 (2.1)
3	TCRP(TCRG)3000P		8.0	18 / 11	10 / 15	90/65	71 / 74	3.23 to 6.02	6.03 to 12.00	25.6 (66.9)	11.2 x 1	190 (207)	2.0 (2.6)
6	TCRP(TCRG)6000P2		8.0	9/5	5/7	90/65	71 / 74	5.50 to 8.66	8.67 to 12.00	118.1	11.2 x 2	409 (444)	4.0 (4.6)

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

		Standard	Cord		vn Speeds @ 90 psi)	Air Consu	/Down mption Rates nin @ 90 psi)	(	h Adjustability B in)	Minimum* Allow. Radius for	Load Chain Diameter (mm) x	Net	Weight for Additional One Foot
Cap. (Tons)	Product Code	Lift (ft)	L (ft)	No Load		No Load		Standard	Optional	Curve (in)	Chain Fall Lines	Weight (lbs)	of Lift (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		7.5	34/22	19 / 29	63 / 49	48 / 57	0.00 to 5.00	5.01 to 8.00	17.7	6.3 x 2	91 (106)	1.2 (1.8)
1	TCRP(TCRG)1000C	10	7.5	37 / 22	21/33	62 / 53	53 / 60	2.28 to 5.00	OR 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	2 22 to 6 02	6.02 to 12.00	21.7 (59.1)	7.1 x 2	111 (128)	1.5 (2.1)
3	TCRP(TCRG)3000C		8.0	18 / 11	10 / 15	90 / 65	71 / 74	3.23 to 6.02	6.03 to 12.00	25.6 (66.9)	11.2 x 1	188 (205)	2.0 (2.6)
6	TCRP(TCRG)6000C2		8.0	9/5	5/7	90/65	71 / 74	5.50 to 8.66	8.67 to 12.00	118.1	11.2 x 2	407 (442)	4.0 (4.6)

Figures in parenthesis are data for geared trolley

Figures in parenthesis are data for geared trolley
\*Minimum flange width for curved beam: 1 Ton Push and 1/8 to 1Ton Geared = 2.87 in.
3 Ton Push and Geared = 3.50 in.

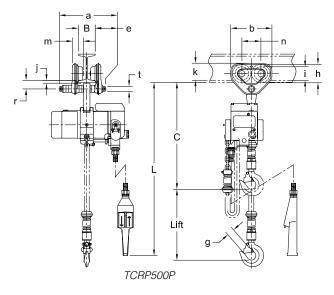
<sup>\*</sup>Minimum flange width for curved beam: 1 Ton Push and 1/8 to 1Ton Geared = 2.87 in. 3 Ton Push and Geared = 3.50 in.

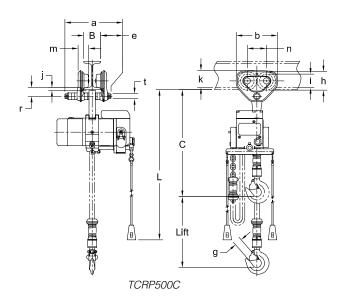


# TCRM, TCRP and TCRG Air Powered Hoists with Air Powered, Push and Geared Trolleys

# PENDANT AND CORD MODELS WITH PUSH TROLLEYS—DIMENSIONS

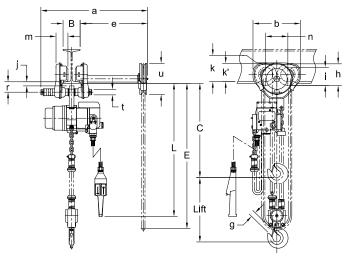
Cap. (Tons)	Product Code	Headroom C (in)	a (in)	b (in)	e (in)	g (in)	h (in)	i (in)	j (in)	k (in)	m (in)	n (in)	r (in)	t (in)
1/4	TCRP250C/P	18.6	8.0	7.2	1.8	1.1	3.2	2.36	0.5	3.0	1.9	3.3	1.5	0.87
1/2	TCRP500C/P	18.6	8.0	7.2	1.8	1.1	3.2	2.36	0.5	3.0	1.9	3.3	1.5	0.87
1	TCRP1000C2/P2	21.3	9.8	9.3	2.2	1.1	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
3	TCRP3000C/P	21.6	12.6	12.8	3.1	1.3	5.8	3.94	1.5	5.3	3.1	6.0	2.7	1.42
6	TCRP6000C2/P2	29.0	17.6	18.9	4.1	1.7	7.3	6.10	3.8	6.7	3.4	7.7	6.0	2.76



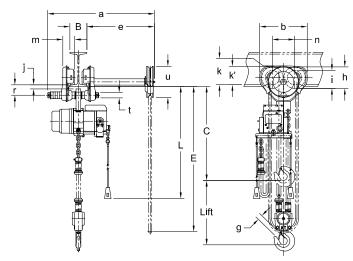


# PENDANT AND CORD MODELS WITH GEARED TROLLEYS—DIMENSIONS

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
3	TCRG3000C/P	21.6	11.0	25.4	12.8	15.9	1.3	5.8	3.94	1.5	5.3	4.5	3.1	6.0	2.7	1.42	7.2
6	TCRG6000C2/P2	29.0	11.4	20.6	18.9	7.0	1.7	7.3	6.10	3.8	6.7	6.5	10.6	7.7	6.0	2.76	8.4



TCRG2000P2



TCRG2000C2