

# PRODUCT RECOVERY SYSTEMS

Increase product yields and reduce cleaning costs



## OVERVIEW

TrueClean® Product Recovery Systems increase your product yields and reduce clean-in-place (CIP) costs by recovering the residual product left behind in the lines after your process. This reduces the amount of time it takes to clean these sections of line. In many cases, the time, water, and chemicals saved offset the cost of the system.

TrueClean Product Recovery Systems utilize sanitary CSI pig projectiles that are reliable, highly effective, and efficient. The projectile silicone is 3-A and FDA compliant.

## FEATURES

- Easily integrates into existing processing systems
- Simple to operate
- Safe and secure
- Controls included
- Pig detection and air control systems
- Built-in pressure release for operator safety

## APPLICATIONS

- Processed Food and Beverage — cheese, yogurt, chocolate, dressings, fats, oils, pre-mix sweeteners, colorants, flavorings, and other additives or minor ingredients
- Home & Personal Care — shampoo, lotion, toothpaste, and makeup
- Chemical industries — detergent, cleansing agents, resins, paints, coatings, and herbicides
- Breweries
- Biotech

MADE IN THE USA

 TrueClean®



## SPECIFICATIONS

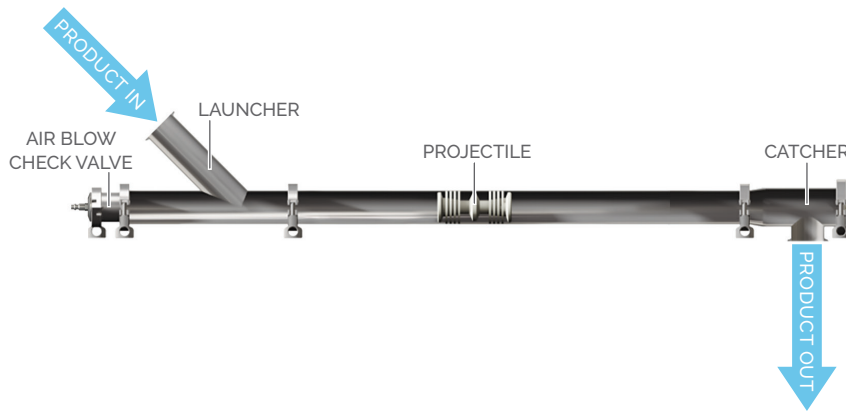
- Max compressed air pressure: 145 psig
- Temperature Range: 0–115°F
- Air Inlet Size: 1/2" FNPT
- Electrical Requirement: AC 100–240V, 50–60Hz ± 6%
- Projectile Velocity: 3–5 ft/sec

## OPTIONS

- Manually Operated — with or without sensor
- Push Button Basic
- Automated Return System

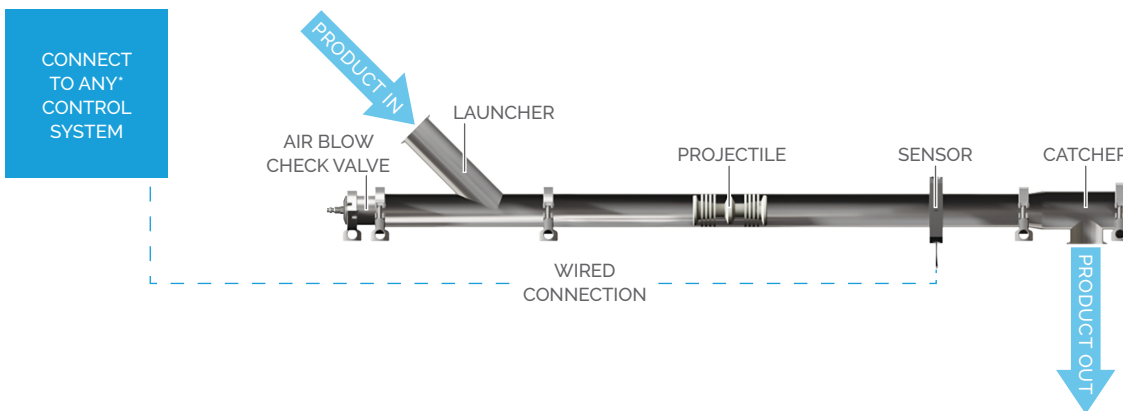
## MANUAL SYSTEM

TrueClean's manual pigging system includes the hygienic piping pieces needed to install the mechanical portion of a product recovery system. However, this system does not include a control system, so the velocity control of the projectile to maintain the desired 3–5 ft/sec will need to be designed and provided by others.



## MANUAL SYSTEM WITH SENSOR

TrueClean's manual pigging system includes the hygienic piping pieces needed to install the mechanical portion of a product recovery system. However, this system does not include a control system, so the velocity control of the projectile to maintain the desired 3–5 ft/sec will need to be designed and provided by others. This system does include a pig detection sensor that can be wired back as an input to a control system to shut off and vent the pressure automatically. Alternatively, one of our control panels can be purchased and added to this system.



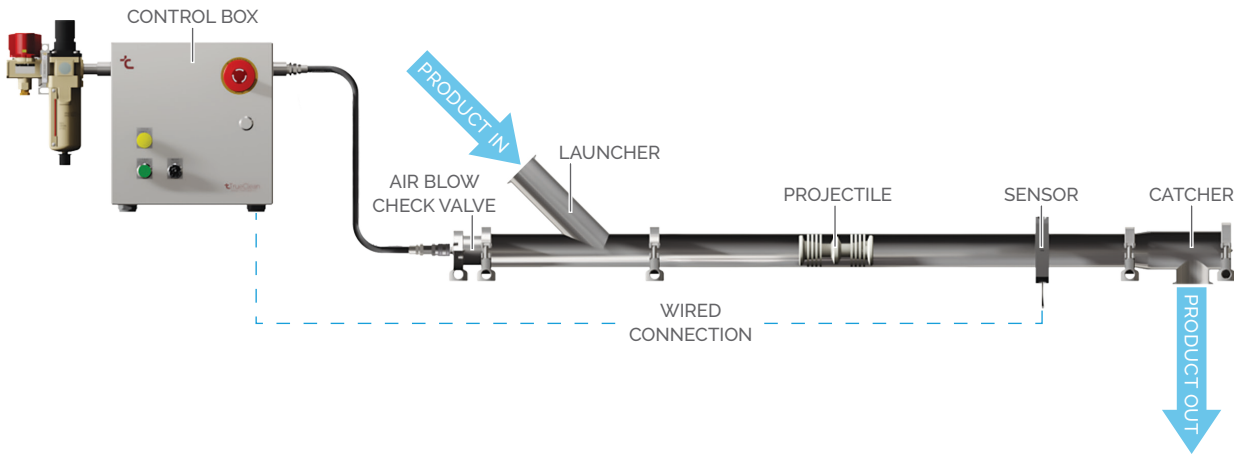
## PLEASE NOTE:

\*For optimal functionality and a desired level of safety, we highly recommend using our controls with any of our Product Recovery Systems. CSI is not responsible for proper functionality, safety, or damage to Product Recovery components for control systems provided by others.



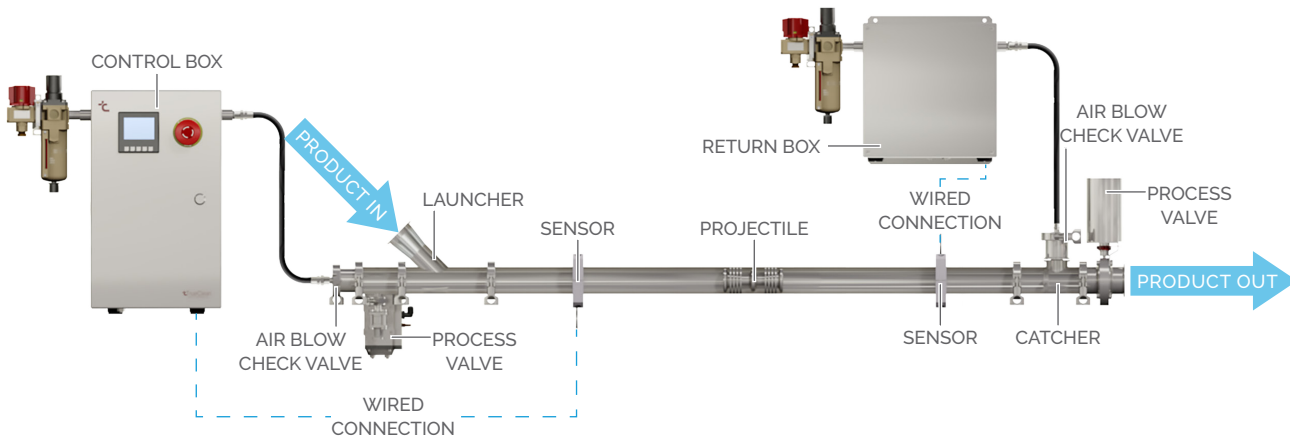
## PUSH BUTTON BASIC SYSTEM

TrueClean's basic control package is a stand-alone system that is designed for one-way recovery. The system features stainless steel construction and built-in velocity control for the projectile. It also has a NEMA 4X rating.



## AUTOMATED RETURN SYSTEM

TrueClean's automated return package is ideal for hard-to-reach or distant catch locations. The system features stainless steel construction and built-in velocity control for the projectile. It has a NEMA 4X rating, and PLC interlocks are also available.



# PART NUMBER CONFIGURATION—SYSTEMS

## BASIC SYSTEM

PRR		30E		BDR		QA		LS		CT		B1		(BLANK)	
SYSTEM TYPE	SIZE & GASKET		PIG STYLE & MATERIAL		AIR CONNECTION		LAUNCHER	CATCHER	CONTROLS		MATERIAL				
PRR = BASIC SYSTEM	15 = 1.5"	E = EPDM  Y = VITON	AS = 4-WIPER STANDARD	R = WHITE FOOD GRADE URETHANE  X = FOOD GRADE SILICONE	QA = QUICK CONNECT WITH AIR BLOW CHECK	LS = LATERAL LAUNCHER	CT = T-STYLE BASIC CATCHER	(BLANK) = NONE  S = SENSOR ONLY  B1 = BASIC PUSH BUTTON CONTROL PANEL AIR BLOW CHECK REQUIRED  B2 = BASIC TOUCH SCREEN CONTROL PANEL AIR BLOW CHECK REQUIRED	(BLANK) = 316  AL = AL-6XN						
	20 = 2"		BS = 8-WIPER STANDARD		QN = QUICK CONNECT, NO AIR BLOW CHECK		CS = IN-LINE BASIC CATCHER								
	25 = 2.5"		AD = 4-WIPER DETECTABLE		FA = FPT WITH AIR BLOW CHECK		CN = NON-BYPASS CATCHER								
	30 = 3"		BD = 8-WIPER DETECTABLE		FN = FPT, NO AIR BLOW CHECK										
	40 = 4"														

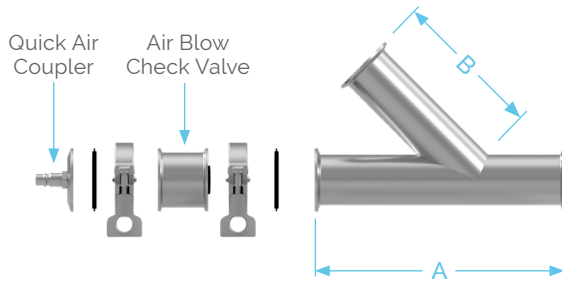
## RETURNING SYSTEM

PRR		30E		BDR		QA		LR		CR		R1		(BLANK)	
SYSTEM TYPE	SIZE & GASKET		PIG STYLE & MATERIAL		AIR CONNECTION		LAUNCHER	CATCHER	CONTROLS		MATERIAL				
PRR = RETURNING SYSTEM	15 = 1.5"	E = EPDM  Y = VITON	AD = 4-WIPER DETECTABLE	R = WHITE FOOD GRADE URETHANE  X = FOOD GRADE SILICONE	QA = QUICK CONNECT WITH AIR BLOW CHECK	LR = AUTOMATED RETURN LAUNCHER	CR = AUTOMATED RETURN CATCHER	R1 = AUTOMATED RETURN TOUCH SCREEN CONTROL PANEL BUTTERFLY VALVE  R2 = AUTOMATED RETURN TOUCH SCREEN CONTROL PANEL SEAT VALVE	(BLANK) = 316  AL = AL-6XN						
	20 = 2"		BD = 8-WIPER DETECTABLE		FA = FPT WITH AIR BLOW CHECK										
	25 = 2.5"														
	30 = 3"														
	40 = 4"														

# DIMENSIONS—LAUNCHERS



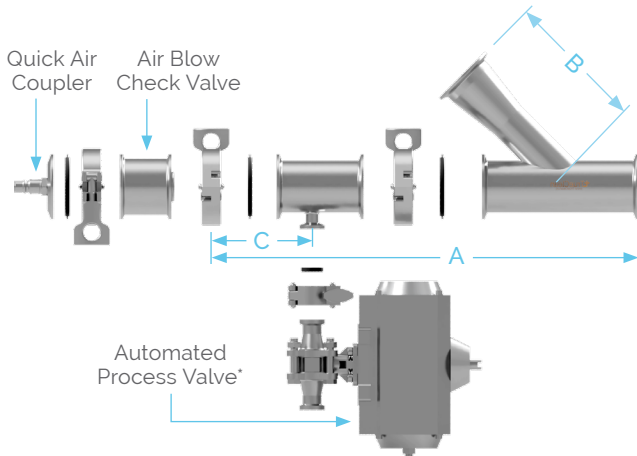
## LATERAL LAUNCHER (LS)



SIZE	A	B
1.5	9-1/8	5-3/16
2	10-5/8	6-1/16
2.5	12-7/16	8-1/2
3	14-1/8	8-1/2
4	19-3/4	11-3/8

All dimensions are shown in inches.

## AUTOMATED RETURN LAUNCHER (LR)



SIZE	A	B	C
1.5	8-1/2	5-1/2	1-7/16
2	9-1/2	6-1/8	1-7/16
2.5	12	6-1/4	1-11/16
3	13-3/4	8-1/2	1-7/16
4	16-3/8	11	1-9/16

All dimensions are shown in inches.

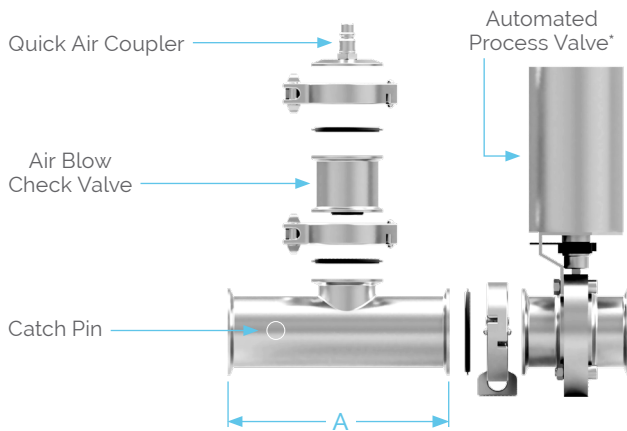
\*Optional seat valves are available upon request.

## LAUNCHERS—PART NUMBER CONFIGURATION



SYSTEM	LAUNCHER	SIZE & GASKET		AIR CONNECTION	MATERIAL
PR = PRODUCT RECOVERY	LS = LATERAL BASIC LAUNCHER LR = AUTOMATED RETURN LAUNCHER	15 = 1.5" 20 = 2" 25 = 2.5" 30 = 3" 40 = 4"	E = EPDM (STANDARD)  Y = VITON	QN = QUICK CONNECT, NO AIR BLOW CHECK QA = QUICK CONNECT, WITH AIR BLOW CHECK FN = FPT, NO AIR BLOW CHECK FA = FPT, WITH AIR BLOW CHECK	(BLANK) = 316  AL = AL-6XN

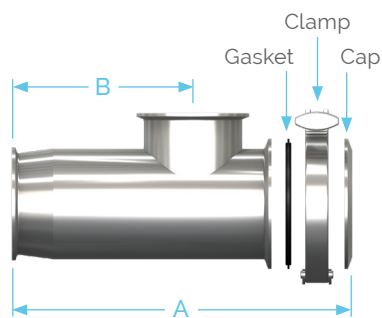
# DIMENSIONS—CATCHERS



## RETURN CATCHER (CR)

SIZE	A
1.5	6-3/8
2	7-3/8
2.5	7-7/8
3	8-3/8
4	10

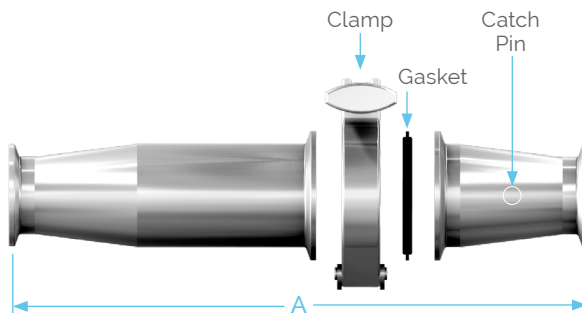
All dimensions are shown in inches.



## T-STYLE CATCHER (CT)

SIZE	A	B
1.5	5-15/16	3-7/8
2	6-11/16	4-3/8
2.5	7-7/16	4-5/8
3	9-3/8	6-1/2
4	10-1/4	6-11/16

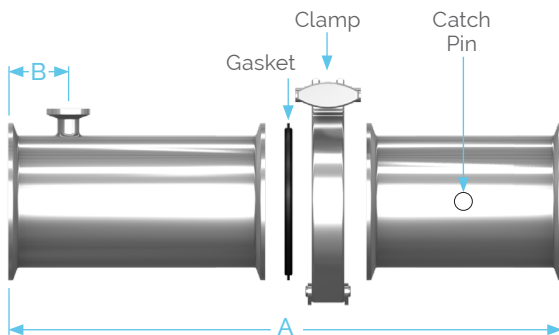
All dimensions are shown in inches.



## IN-LINE BYPASS CATCHER (CS)

SIZE	A
1.5	9
2	9
2.5	9-1/2
3	13-5/8
4	13-5/8

All dimensions are shown in inches.



## NON-BYPASS CATCHER (CN)

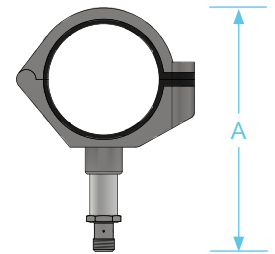
SIZE	A	B
1.5	7-3/16	1-3/8
2	7-11/16	1-3/8
2.5	8-11/16	1-3/8
3	10-7/16	1-3/8
4	12-7/16	1-3/8

All dimensions are shown in inches.  
Maximum operating pressure of 125 PSIG.



## CATCHERS—PART NUMBER CONFIGURATION

	PR	-	CR	-	20E	-	QN	-	(BLANK)
SYSTEM TYPE	CATCHER			SIZE & GASKET		AIR CONNECTION			MATERIAL
PR = PRODUCT RECOVERY	CT = T-STYLE CATCHER CS = IN-LINE BYPASS CATCHER CN = NON-BYPASS CATCHER CR = RETURN CATCHER			15 = 1.5" 20 = 2" 25 = 2.5" 30 = 3" 40 = 4"	E = EPDM (STANDARD) Y = VITON	QN = QUICK CONNECT, NO AIR BLOW CHECK QA = QUICK CONNECT, WITH AIR BLOW CHECK (CR ONLY) FN = FPT, NO AIR BLOW CHECK FA = FPT, WITH AIR BLOW CHECK (CR ONLY)			(BLANK) = 316 AL = AL-6XN



## BLOCK-STYLE PROJECTILE SENSOR

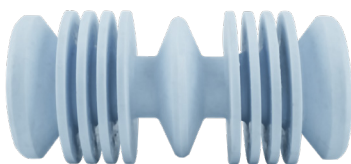
SIZE	PART NUMBER	OVERALL LENGTH
1.5	PR-S15	4-15/16
2	PR-S20	4-15/16
2.5	PR-S25	4-15/16

All dimensions are shown in inches.

## PROJECTILE SENSOR

SIZE	PART NUMBER	A
1.5	PR-S15-SS	4-3/8
2	PR-S20-SS	4-15/16
2.5	PR-S25-SS	5-1/2
3	PR-S30-SS	5-15/16
4	PR-S40-SS	7

All dimensions are shown in inches. Includes 16.4-ft. cable.

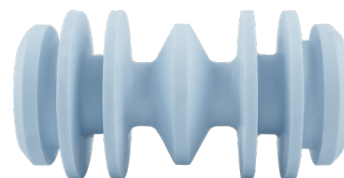


## EIGHT-WIPER PROJECTILE PIG

Pigs provide greater flexibility & efficiency with a range of applications.

TUBE OD	ITEM NUMBER		OVERALL LENGTH
	WITHOUT MAGNET	WITH MAGNET	
1.5	PR-P15-BSX	PR-P15-BDX	3-19/20
2	PR-P20-BSX	PR-P20-BDX	4-11/25
2.5	PR-P25-BSX	PR-P25-BDX	5-9/20
3	PR-P30-BSX	PR-P30-BDX	6-4/25
4	PR-P40-BSX	PR-P40-BDX	7-3/4

All dimensions are shown in inches.



## FOUR-WIPER PROJECTILE PIG

Ideal for products that are thick, viscous, difficult to clean, and/or contain large particulates.

TUBE OD	ITEM NUMBER		OVERALL LENGTH
	WITHOUT MAGNET	WITH MAGNET	
1.5	PR-P15-ASX	PR-P15-ADX	3-19/20
2	PR-P20-ASX	PR-P20-ADX	4-11/25
2.5	PR-P25-ASX	PR-P25-ADX	5-9/20
3	PR-P30-ASX	PR-P30-ADX	6-4/25
4	PR-P40-ASX	PR-P40-ADX	7-3/4

All dimensions are shown in inches.

# DIMENSIONS—AIR CONTROL PANELS

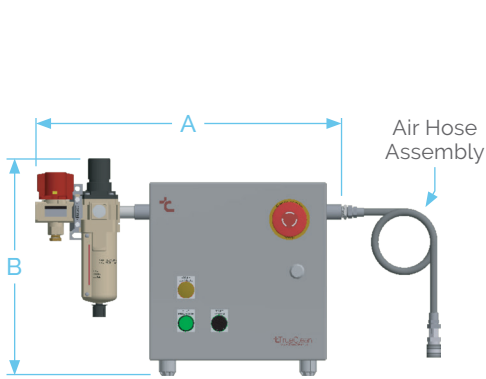


FIG. 1 - BASIC PACKAGE WITH PUSH BUTTONS

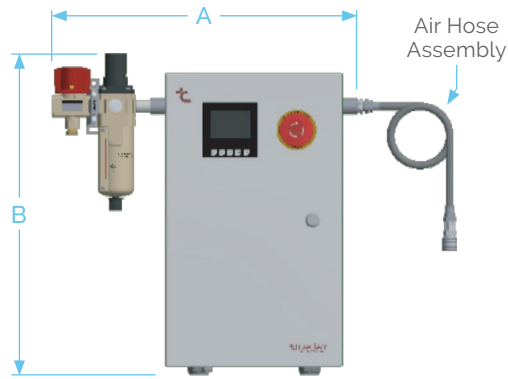


FIG. 2 - BASIC PACKAGE WITH TOUCHSCREEN

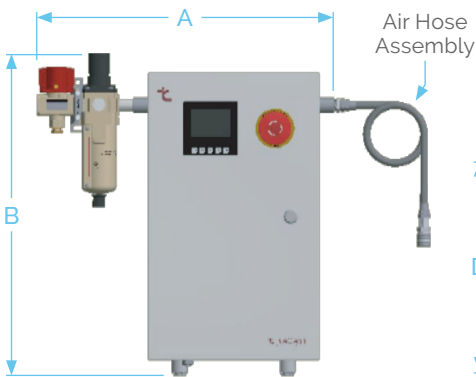


FIG. 3 - AUTOMATED RETURN PACKAGE WITH TOUCHSCREEN (INCLUDES TWO CABINETS AS SHOWN ABOVE)

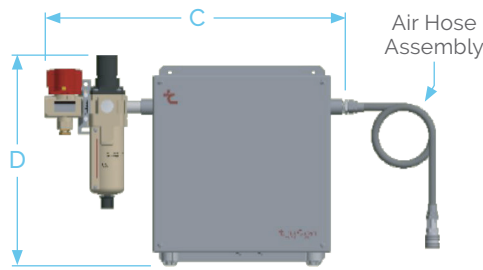


FIG. 4 - AIR HOSE ASSEMBLY

## AIR CONTROL — INCLUDES AIR HOSE ASSEMBLIES

FIG.	PACKAGE TYPE	A	B	C	D	DEPTH	
1	BASIC PACKAGE WITH PUSH BUTTONS	20-3/4	14-3/4	-	-	7.129	
2	BASIC PACKAGE WITH TOUCHSCREEN	20-3/4	22	-	-	7.167	
3	AUTOMATED RETURN PACKAGE WITH TOUCHSCREEN	20-3/4	22-1/2	20-3/4	14-1/2	7.167	6.469

All dimensions are shown in inches.

## AIR HOSE ASSEMBLIES

FIG.	SIZE	CONNECTION TYPE	OVERALL LENGTH
4	30 — FITS SYSTEMS UP TO 3"	QUICK CONNECT	10 FEET
4	30 — FITS SYSTEMS UP TO 3"	MALE PIPE THREAD	10 FEET
4	40 — FITS 4" SYSTEMS	QUICK CONNECT	10 FEET
4	40 — FITS 4" SYSTEMS	MALE PIPE THREAD	10 FEET