

Mark X if none											
						X				X	X
Sample											
NCR-80.	IX	C	SD	A	H	X	A	N	A	X	X

Display
 X: X - No Bindisc - No Window (1, 2, 3)
 A: A - Bindisc Top Mounted with Window (1, 2, 3)
 F: F - No Bindisc - With Window Top (2, 3)
 B: B - Bindisc Side Mounted with Window (1, 2)

Connection
 N: N - Two 1/2" NPT / blind plug (1, 2, 3)
 Q: Q - Two 1/2" NPT / without plug (1, 2, 3)

Housing
 A: A - Aluminium single chamber (1, 2)
 K: K - Plastic single chamber (1, 2)
 8: 8 - Stainless steel single chamber (1, 2)
 R: R - Plastic double chamber (1, 2)
 V: V - Stainless steel single chamber (Cast) (1, 2, 3)
 W: W - Stainless steel double chamber (1, 2, 3)
 D: D - Aluminium double chamber (1, 2, 3)

Output
 H: H - Two wire 4-20mA (1, 2, 3)
 U: U - Four-wire Modbus (1, 2, 3)
 B: B - Four-wire 4-20mA (1, 2, 3)
 I: I - Four-wire 4-20mA (1, 2, 3)
 P: P - Two-wire Profibus PA (1, 2, 3)

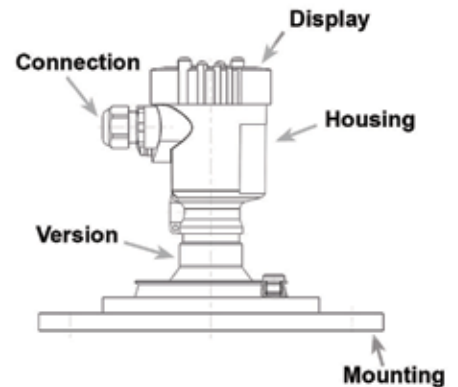
Seal
 C: C - No Seal (1)
 D: D - FKM (1)
 E: E - EPDM (1)
 F: F - EPDM (2, 3)
 A: A - FKM (2, 3)
 B: B - FKM (2, 3)

Mounting
 XX: XX - No Mounting (1)
 XC: XC - 6.7" Mounting Strap (1)
 XD: XD - 11.8" Mounting Strap (1)
 AU: AU - 3" PP-GF30 Flange (1)
 AL: AL - 4" PP-GF30 Flange (1)
 AO: AO - 8" PP-GF30 Flange (1)
 AM: AM - 6" PP-GF30 Flange (1)
 TD: TD - Thread 1/2" NPT PN20, ASME B1.20.1 / 316L (2)
 FD: FD - Flange 3" 150lb FF, ASME / 316 / 316L (3)
 FE: FE - Flange 4" 150lb FF, ASME / 316 / 316L (3)
 FF: FF - Flange 6" 150lb FF, ASME / 316 / 316L (3)
 SD: SD - Swiveling holder with flange 4" 150lb / 316 / 316L (3)
 SE: SE - Swiveling holder with flange 6" 150lb / 316 / 316L (3)
 SF: SF - Swiveling holder with flange 8" 150lb / 316 / 316L (3)

Version
 B: B - Plastic horn antenna (1)
 T: T - Thread (2)
 C: C - Metal jacketed lens antenna (3)

Approvals
 CC: CC - CSA (IS) Class I (1, 3)
 CD: CD - CSA (XP-AIS) Class I (1, 3)
 CE: CE - CSA (XP) Class I (1, 3)
 CR: CR - CSA (DIP) Class II (1, 3)
 IX: IX - Designed for unclassified area (1, 2, 3)
 FC: FC - FM (IS) Class I, II, III (1, 3)
 FD: FD - FM (XP-AIS) Class I (1, 3)
 FR: FR - FM (DIP) Class II (1, 3)
 FE: FE - FM (XP) Class I (1, 3)

Power Pac
 NCR-80.: 80 GHz Radar



1: Plastic
 2: Thread
 3: Metal



NCR-80

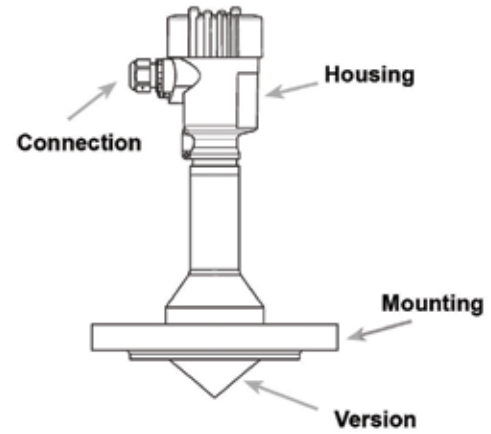
Non-contact radar continuously measures the level of powders, granules, solids, or liquids in a vessel. Reliable and precise in high dust, 80 GHz non-contact radar excels in powders and solids in tall and narrow vessels. Pulse radar transmitters using a lower frequency are more commonly used in liquids and perform in diverse tank shapes and environmental conditions.

Description	CODE	Part No.
BASE UNIT		
80 GHz Radar Level Sensor	NCR-80.	
APPROVALS		
Approvals: CC - CSA (IS) Class I, II, III, Div 1, Groups A, B, C, D, E, F, G	CC	
Approvals: CD - CSA (XP-AIS) Class I, Div 1, Groups A, B, C, D, (DIP-AIS) Class II, III Div 1, Groups E, F, G	CD	
Approvals: CE - CSA (XP) Class I, Div 1, Groups A, B, C, D, (DIP) Class II, III Div 1, Groups E, F, G	CE	
Approvals: CR - CSA (DIP) Class II, DIV 1 Groups E, F, G	CR	
Approvals: IX - Designed for unclassified area, non-EX environment	IX	
Approvals: FC - FM (IS) Class I, II, III, Div 1, Groups A, B, C, D, E, F, G	FC	
Approvals: FD - FM (XP-AIS) Class I, Div 1, Groups A, B, C, D, (DIP-AIS) Class II, III Div 1, Groups E, F, G	FD	
Approvals: FR - FM (DIP) Class II, DIV 1 Groups E, F, G	FR	
Approvals: FE - FM (XP) Class I, Div 1, Groups A, B, C, D, (DIP) Class II, III Div 1, Groups E, F, G	FE	
VERSION		
Version: B - Plastic horn antenna / PP	B	
Version: T - Thread with integrated horn antenna/PEEK	T	
Version: C - Metal jacketed lens antenna with rinsing air connection / PEEK	C	
MOUNTING		
Mounting: XX - No Mounting	XX	
Mounting: XC - Mounting strap, length: 6.7 inches (170mm) / 316L	XC	
Mounting: XD - Mounting strap, length: 11.8 inches (300 mm) / 316L	XD	
Mounting: AU - Adapter flange 3" 150lb FF, ASME / PP-GF30	AU	
Mounting: AL - Adapter flange 4" 150lb FF, ASME / PP-GF30	AL	
Mounting: AO - Adapter flange 8" 150lb FF, ASME / PP-GF30	AO	
Mounting: AM - Adapter flange 6" 150lb FF, ASME / PP-GF30	AM	
Mounting: TD - Thread 1½" NPT PN20, ASME B1.20.1 / 316L	TD	
Mounting: FD - Flange 3" 150lb FF, ASME / 316 / 316L	FD	
Mounting: FE - Flange 4" 150lb FF, ASME / 316 / 316L	FE	
Mounting: FF - Flange 6" 150lb FF, ASME / 316 / 316L	FF	
Mounting: SD - Swiveling holder with flange 4" 150lb / 316 / 316L	SD	
Mounting: SE - Swiveling holder with flange 6" 150lb / 316 / 316L	SE	
Mounting: SF - Swiveling holder with flange 8" 150lb / 316 / 316L	SF	

Description	CODE	Part No.
SEAL		
Seal: C - No Seal - PP / Process Temperature: -40°F to +176°F (80°C)	C	
Seal: D - FKM (SHS FPM 70C3 GLT) and PP / Process Temperature: -40°F to +176°F (80°C)	D	
Seal: E - EPDM (COG AP310) and PP / Process Temperature: -40°F to +176°F (80°C)	E	
Seal: F - EPDM (COG AP302) and PEEK (suitable for foodstuffs / pharmaceuticals) / Process Temperature: -40°F to 266°F (130°C)	F	
Seal: A - FKM (SHS FPM 70C3 GLT) and PEEK / Process Temperature: -40°F to +266°F (130°C)	A	
Seal: B - FKM (SHS FPM 70C3 GLT) and PEEK / Process Temperature: -40°F to +392°F (200°C)	B	
OUTPUT		
Output: H - Two wire 4-20mA / HART®; 12-35V DC	H	
Output: U - Four-wire Modbus (Requires Dual Chamber Housing); 8-30V DC	U	
Output: B - Four-wire 4-20mA / HART®; 90-253 VAC; 50/60 Hz (Requires Dual Chamber Housing)	B	
Output: I - Four-wire 4-20mA / HART®; 9.6-48V DC; 20-42V AC (Requires Dual Chamber Housing)	I	
Output: P - Two-wire Profibus PA	P	
HOUSING		
Housing: A - Aluminium single chamber / IP66/IP68 (0.2bar)	A	
Housing: K - Plastic single chamber / IP66/IP67	K	
Housing: 8 - Stainless steel single chamber (electropolished) / IP66/IP68 (0.2 bar)	8	
Housing: R - Plastic double chamber / IP66/IP67	R	
Housing: V - Stainless steel single chamber (precision casting) / IP66/IP68 (0.2 bar)	V	
Housing: W - Stainless steel double chamber / IP66/IP67	W	
Housing: D - Aluminium double chamber / IP66/IP67	D	
CONNECTION		
Cable Entry: N - Two ½" NPT / blind plug in one opening	N	
Cable Entry: Q - Two ½" NPT / without plug in either opening	Q	
DISPLAY		
Display: X - Without inspection window or BinDisc	X	
Display: A - Bindisc top mounted with display window	A	
Display: F - Top mounted BinDisc with inspection window	F	
Display: B - Side mounted BinDisc with window	B	
MOUNTING PLATES		
Self-aligning carbon steel flange with 1.5" Nylon ball and socket flange provides vertical connection for tanks with a radius dome or angled roof top, provides easy aiming flexibility. Based on a 7" bolt pattern.		416-0720
0° mounting plate with 4" ANSI flange finished in a gray powder-coat, includes gasket and bolts.		730-0747
10° mounting plate with 4" ANSI flange finished in a gray powder-coat, includes gasket and bolts.		730-0756
30° mounting plate with 4" ANSI flange finished in a gray powder-coat, includes gasket and bolts.		730-0748
45° mounting plate with 4" ANSI flange finished in a gray powder-coat, includes gasket and bolts.		730-0776
ACCESSORIES		
WL-20 - Indoor / outdoor standard (-20°F to +140°F) wireless transceiver unit NEMA 4X with 4dBi omnidirectional antenna, selectable 115 VAC / 230 VAC, RS-485 connection terminal		730-0713
Data Cable - ft. of Allen-Bradley blue hose RS-485 data cable, 20 AWG shielded twin axial, twisted pair, low capacitance, Belden #9463 or equivalent		398-0090

Description	CODE	Part No.
BinDisc stand-alone interface enables push-button sensor setup and configuration. The BinDisc can be integrated into the sensor housing and is installed and visible under the housing cover for easy viewing. BinDisc simplifies setup and provides continuous, at-a-glance, operational status of the sensor. This handy interface aids in on-site system diagnosis.		771-0053

Mark X if none									
								X	X
Sample									
NCR-30.	XX	N	AI	H	H	N	A	X	X



Display
 X: X - No Bindisc - No Window
 A: A - Bindisc Top Mounted with Window
 F: F - No Bindisc - With Window Top
 B: B - Bindisc Side Mounted with Window

Connection
 N: N - Two 1/2" NPT / blind plug
 Q: Q - Two 1/2" NPT / without plug

Housing
 H: H - Aluminium single chamber
 S: S - Aluminium double chamber
 V: V - Stainless steel single chamber (Cast)
 8: 8 - Stainless steel single chamber
 W: W - Stainless steel double chamber

Output
 H: H - Two wire 4-20mA
 7: 7 - Four-wire Modbus
 I: I - Four-wire 4-20mA
 B: B - Four-wire 4-20mA

Mounting
 CA: CA - 2" Hygenic Clamp
 CB: CB - 3" Hygenic Clamp
 AE: AE - 2" 150 lb RF
 AI: AI - 3" 150 lb RF
 AK: AK - 4" 150 lb RF
 AM: AM - 6" 150 lb RF
 AN: AN - 8" 150 lb RF

Version
 N: N - Hygenic

Approvals
 XX: XX - Designed for unclassified area
 UX: UX - FM (NI) Class I
 UF: UF - FM (IS) Class I, II, III
 UG: UG - FM (XP-IS) Class I, II, III
 UD: UD - FM (XP) Class I
 KX: KX - CSA (NI) Class I
 KF: KF - CSA (IS) Class I, II, III
 KG: KG - CSA (XP-IS) Class I, II, II

Power Pac
 NCR-30.: 26 GHz Radar

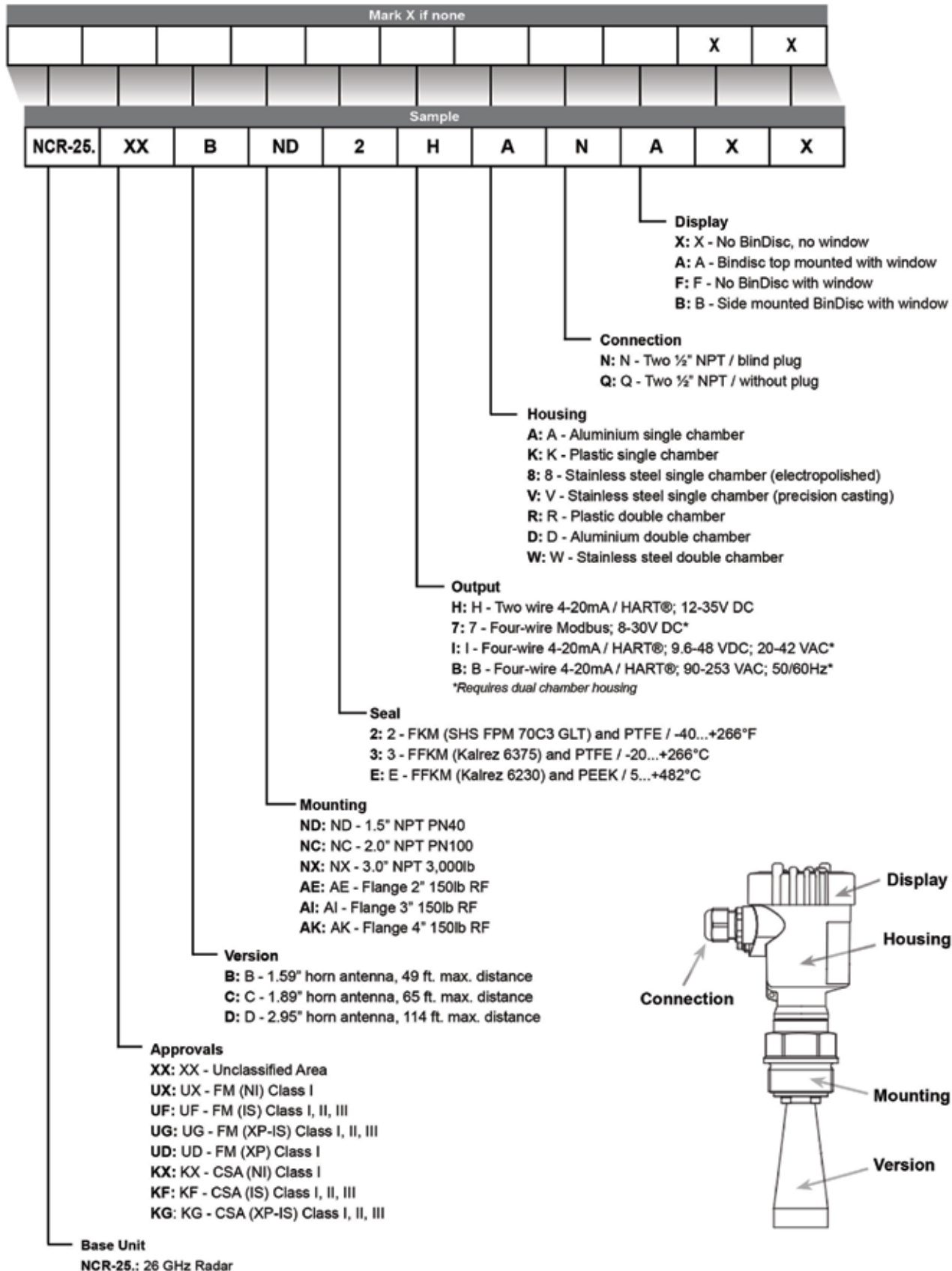


NCR-30

The BinMaster NCR-30 non-contact radar level sensor continuously measures liquids contained in vessels up to 114 feet tall. The NCR-30 is for use in aggressive materials such as asphalt or syrups. It is also appropriate for sanitary environments such as human or animal food processing or pharmaceuticals. NCR-30 is compatible with the BinView® web application and Binventory® software for simple access to inventory data from a phone, tablet, or desktop PC.

Description	CODE	Part No.
BASE UNIT		
26 GHz radar level sensor	NCR-30.	
APPROVALS		
Approvals: XX - Designed for unclassified area, non-EX environment	XX	
Approvals: UX - FM (NI) Class I, DIV 2 Groups A, B, C, D	UX	
Approvals: UF - FM (IS) Class I, II, III, Div 1, Groups A, B, C, D, E, F	UF	
Approvals: UG - FM (XP-IS) Class I, II, III Div 1, Groups A, B, C, D, E, F, G	UG	
Approvals: UD - FM (XP) Class I, Div 1, Groups A, B, C, D, (DIP) Class II, III Div 1, Groups E, F, G	UD	
Approvals: KX - CSA (NI) Class I, DIV 2 Groups A, B, C, D	KX	
Approvals: KF - CSA (IS) Class I, II, III, Div 1, Groups A, B, C, D, E, F	KF	
Approvals: KG - CSA (XP-IS) Class I, II, III Div 1, Groups A, B, C, D, E, F, G	KG	
VERSION		
Version: H - Hygienically encapsulated horn antenna / PTFE / -40...+200°C	N	
MOUNTING		
Fitting: CA - Clamp 2" PN16 (ø64mm) DIN32676, ISO2852 / 316L	CA	
Fitting: CB - Clamp 3" PN10 (ø91mm) DIN32676, ISO2852 / 316L	CB	
Mounting: AE - Flange 2" 150lb RF, ASME B16.5 / 316/316L	AE	
Mounting: AI - Flange 3" 150lb RF, ASME B16.5 / 316/316L	AI	
Mounting: AK - Flange 4" 150lb RF, ASME B16.5 / 316/316L	AK	
Mounting: AM - Flange 6" 150lb RF, ASME B16.5 / 316/316L	AM	
Mounting: AN - Flange 8" 150lb RF, ASME B16.5 / 316/316L	AN	
OUTPUT		
Output: H - Two wire 4-20mA / HART®; 12-35V DC	H	
Output: 7 - Four-wire Modbus (Requires Dual Chamber Housing); 8-30V DC	7	
Output: I - Four-wire 4-20mA / HART®; 9.6-48V DC; 20-42V AC (Requires Dual Chamber Housing)	I	
Output: B - Four-wire 4-20mA / HART®; 9.6-48V DC; 20-42V AC (Requires Dual Chamber Housing)	B	
HOUSING		
Housing: H - Aluminium single chamber / IP66/IP68 (0.2bar)	H	
Housing: S - Aluminium double chamber / IP66/IP67	S	
Housing: V - Stainless steel single chamber (precision casting) / IP66/IP68 (0.2 bar)	V	
Housing: 8 - Stainless steel single chamber (electropolished) / IP66/IP68 (0.2 bar)	8	

Description	CODE	Part No.
Housing: W - Stainless steel double chamber / IP66/IP67	W	
CONNECTION		
Cable Entry: N - Two ½" NPT / blind plug in one opening	N	
Cable Entry: Q - Two ½" NPT / without plug in either opening	Q	
DISPLAY		
Display: X - Without inspection window or BinDisc	X	
Display: A - Bindisc top mounted with display window	A	
Display: F - Top mounted BinDisc with inspection window	F	
Display: B - Side mounted BinDisc with window	B	
ACCESSORIES		
BinDisc stand-alone interface enables push-button sensor setup and configuration. The BinDisc can be integrated into the sensor housing and is installed and visible under the housing cover for easy viewing. BinDisc simplifies setup and provides continuous, at-a-glance, operational status of the sensor. This handy interface aids in on-site system diagnosis.		771-0053





NCR-25

The BinMaster NCR-25 non-contact radar level sensor continuously measures liquids contained in vessels up to 114 feet tall. The NCR-25 is best suited for water, fuels, oils, and other freely-flowing, clean liquids. It is compatible with the BinView® web application and BinInventory® software for simple access to inventory data from a phone, tablet, or desktop PC.

Description	CODE	Part No.
BASE UNIT		
26 GHz radar level sensor for liquids	NCR-25.	
APPROVALS		
Approvals: XX - Unclassified area, non-EX environment, general purpose FM/CSA/CE	XX	
Approvals: UX - FM (NI) Class I, DIV 2 Groups A, B, C, D	UX	
Approvals: UF - FM (IS) Class I, II, III, Div 1, Groups A, B, C, D, E, F	UF	
Approvals: UG - FM (XP-IS) Class I, II, III Div 1, Groups A, B, C, D, E, F, G	UG	
Approvals: UD - FM (XP) Class I, Div 1, Groups A, B, C, D, (DIP) Class II, III Div 1, Groups E, F, G	UD	
Approvals: KX - CSA (NI) Class I, DIV 2 Groups A, B, C, D	KX	
Approvals: KF - CSA (IS) Class I, II, III, Div 1, Groups A, B, C, D, E, F	KF	
Approvals: KG - CSA (XP-IS) Class I, II, III Div 1, Groups A, B, C, D, E, F, G	KG	
VERSION		
Version: B - 316L horn antenna 1.59" - 49 ft. max. measurement, 20° beam angle	B	
Version: C - 316L horn antenna 1.89" - 65 ft. max. measurement, 15° beam angle	C	
Version: D - 316L horn antenna 2.95" - 114 ft. max. measurement, 10° beam angle	D	
MOUNTING		
Mounting: ND - 1.5" NPT PN40	ND	
Mounting: NC - 2.0" NPT PN100	NC	
Mounting: NX - 3.0" NPT 3,000lb	NX	
Mounting: AE - Flange 2" 150lb RF, ASME B16.5 / 316/316L	AE	
Mounting: AI - Flange 3" 150lb RF, ASME B16.5 / 316/316L	AI	
Mounting: AK - Flange 4" 150lb RF, ASME B16.5 / 316/316L	AK	
SEAL		
Seal: 2 - FKM (SHS FPM 70C3 GLT) and PTFE / -40...+266°F	2	
Seal: 3 - FFKM (Kalrez 6375) and PTFE / -20...+266°C	3	
Seal: E - FFKM (Kalrez 6230) and PEEK / 5...+482°C	E	
OUTPUT		
Output: H - Two wire 4-20mA / HART®; 12-35V DC	H	
Output: 7 - Four-wire Modbus (Requires Dual Chamber Housing); 8-30V DC	7	
Output: I - Four-wire 4-20mA / HART®; 9.6-48 VDC; 20-42 VAC (Requires Dual Chamber Housing)	I	
Output: B - Four-wire 4-20mA / HART®; 90-253 VAC; 50/60Hz (Requires Dual Chamber Housing)	B	

Description	CODE	Part No.
HOUSING		
Housing: A - Aluminium single chamber / IP66/IP68 (0.2bar)	A	
Housing: K - Plastic single chamber / IP66/IP67	K	
Housing: 8 - Stainless steel single chamber (electropolished) / IP66/IP68 (0.2 bar)	8	
Housing: V - Stainless steel single chamber (precision casting) / IP66/IP68 (0.2 bar)	V	
Housing: R - Plastic double chamber / IP66/IP67	R	
Housing: D - Aluminium double chamber / IP66/IP67	D	
Housing: W - Stainless steel double chamber / IP66/IP67	W	
CONNECTION		
Cable Entry: N - Two 1/2" NPT / blind plug in one opening	N	
Cable Entry: Q - Two 1/2" NPT / without plug in either opening	Q	
DISPLAY		
X - Without inspection window or BinDisc	X	
Display: A - Bindisc top mounted with display window	A	
Display: F - No BinDisc with inspection window	F	
Display: B - Side mounted BinDisc with window	B	
MOUNTING PLATES		
Self-aligning carbon steel flange with 1.5" Nylon ball and socket flange provides vertical connection for tanks with a radius dome or angled roof top, provides easy aiming flexibility. Based on a 7" bolt pattern.		416-0720
SSMP-1 - Self-aligning carbon steel 3" ball and socket flange provides vertical connection for tanks with a radius dome or angled roof top, provides easy aiming flexibility.		416-0367
BinDisc stand-alone interface enables push-button sensor setup and configuration. The BinDisc can be integrated into the sensor housing and is installed and visible under the housing cover for easy viewing. BinDisc simplifies setup and provides continuous, at-a-glance, operational status of the sensor. This handy interface aids in on-site system diagnosis.		771-0053