753

North American

Explosion proof, IECEx and ATEX Approved Flameproof Exd, Increased Safety Exe (Note: Dual Marked UL & ATEX /IECEx as standard)

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S	✓ 15 mm (G'Approx	<u> </u>

-) Inspectable Deluge Seal Offering IP66, IP67, IP68 & IP69 Ingress Protection
- Transparent Elastomeric Fully Inspectable Compound Pot – compatible with both injectable resin and 2 part compound
 - Reversible Armour Clamp For all types of armour and braid.
 - Patented Cable Gland Tightening Guide Helps prevent damage caused by over tightening Unique Rear Seal - Offering ultimate sealing over an extremely wide cable acceptance range.

Dual certified exe/Exd group I mining barrier gland, providing a seal around individual cable cores, especially for cables that exhibit "cold flow" characteristics, are not effectively filled or have hygroscopic fillers. For use with single wire armour 'W', wire braid 'X', steel tape armour 'Z' elastomer and plastic insulated cables. The ICG/653/UNIVERSAL is available with either ExPress liquid barrier resin or QSP 2-part hand mix compound, both with a cure time of 30 minutes

Entry Th					Cable Gland Selection Table						
	iread Size A	Cable Acceptance Details							Hexagon Dimensions		
Metric	c NPT* Standard	Inner Jacket Cores		Outer Jacket 'B'		Armour / Braid 'C'		'G'	Across Flats	Across Corners	
		Max Over Cores 'D'	Max Inner Jacket 'E'	Max No Cores	Min	Max	Orientation 1	Orientation 2		ACTOSS FIATS	Across Comers
M20	1/2″	0.31″	0.32″	12.0	0.22″	0.47″	0.0315"/0.0492"	0"/0.0315"	2.3″	0.94″	1.04″
M20	1/2″	0.35″	0.46″	12.0	0.37″	0.63″	0.0315"/0.0492"	0"/0.0315"	2.3″	0.94″	1.04″
M20	³ ⁄4″ or ¹ ⁄2″	0.43″	0.55″	15.0	0.49″	0.81″	0.0315"/0.0492"	0"/0.0315"	2.39″	1.18″	1.28″
M25	1" or ¾"	0.63″	0.78″	30.0	0.67″	1.02″	0.0492″/0.063″	0″/0.0276″	2.65″	1.42″	1.56″
M32	1¼" or 1"	0.86″	1.03″	42.0	0.87″	1.3″	0.063"/0.0787"	0"/0.0276"	2.88″	1.81″	1.99″
VI40	11/2" or 11/4"	1.05″	1.27″	60.0	1.1″	1.61″	0.063"/0.0787"	0"/0.0276"	3.08″	2.17″	2.39″
M50	2″	1.48″	1.74″	80.0	1.42″	2.07″	0.0709"/0.0984"	0"/0.0394"	3.84″	2.56″	2.79″
M63	21/2″	1.93″	2.20″	100.0	1.81″	2.57″	0.0709"/0.0984"	0″/0.0394″	3.68″	3.15″	3.46″
M75	3″	2.35″	2.68″	120.0	2.24″	3.07″	0.0709"/0.0984"	0"/0.0394"	4.11″	3.74″	4.09"
	120 120 125 132 140 150 163 175	Standard 120 ½" 120 ½" 120 ½" 120 ½" 120 ¾" or ½" 120 ¾" or ½" 121 ¼" or 1½" 132 1¼" or 1" 140 1½" or 1¼" 150 2" 163 2½" 175 3"	NPT* Standard Max Over Cores'D' 120 ½" 0.31" 120 ½" 0.35" 120 ½" 0.43" 120 ¼" or ½" 0.43" 120 ¼" or ½" 0.43" 121 1" or ¾" 0.63" 122 1" or ¾" 0.86" 132 1¼" or 1" 1.05" 140 1½" or 1¼" 1.05" 150 2" 1.48" 163 2½" 1.93" 175 3" 2.35"	NPT* Standard Max Over Max Over Max Over Jacket 'E' 120 '2" 0.31" 0.32" 120 '2" 0.31" 0.32" 120 '2" 0.31" 0.46" 120 '2" 0.33" 0.46" 120 '4" or '4" 0.43" 0.55" 121 1" or '4" 0.63" 0.78" 122 1" or '4" 0.86" 1.03" 132 1'4" or 1" 0.86" 1.03" 140 1/2" or 114" 1.05" 1.27" 150 2" 1.48" 1.74" 163 2/2" 1.93" 2.20" 175 3" 2.35" 2.68"	NPT* Standard Max Over Max Over Cores'D' Max Nob Jacket'E' Max Nob Cores'D' 120 ½" 0.31" 0.32" 12.0 120 ½" 0.31" 0.32" 12.0 120 ½" 0.35" 0.46" 12.0 120 ½" 0.43" 0.55" 15.0 120 ¼" or ½" 0.63" 0.78" 30.0 121 1" or ¾" 0.63" 1.03" 42.0 132 1¼" or 1" 0.86" 1.03" 42.0 140 1½" or 1¼" 1.05" 1.27" 60.0 150 2" 1.48" 1.74" 80.0 163 2½" 1.93" 2.20" 10.0 175 3" 2.35" 2.68" 120.0	NPT* Standard Max Over Cores'D' Max Inner Jacket'E' Max No Cores Min 120 ½" 0.31" 0.32" 12.0 0.22" 120 ½" 0.31" 0.32" 12.0 0.22" 120 ½" 0.35" 0.46" 12.0 0.37" 120 ½" 0.35" 0.46" 12.0 0.37" 120 ¼"or ½" 0.43" 0.55" 15.0 0.49" 125 1"or ¾" 0.63" 0.78" 30.0 0.67" 132 1¼"or 1" 0.86" 1.03" 42.0 0.87" 140 1½"or 1¼" 1.05" 1.27" 60.0 1.1" 150 2" 1.48" 1.74" 80.0 1.42" 163 2½" 1.93" 2.20" 100.0 1.81" 175 3" 2.35" 2.68" 120.0 2.24"	NPT* Standard Max Over Max Over Cores Max Inner Max In Max No Cores Min Max 120 $strample''$ 0.31" 0.32" 12.0 0.22" 0.47" 120 $strample''$ 0.31" 0.32" 12.0 0.22" 0.47" 120 $strample''$ 0.31" 0.46" 12.0 0.37" 0.63" 120 $strample''$ 0.35" 0.46" 12.0 0.37" 0.63" 120 $strample'''$ 0.43" 0.55" 15.0 0.49" 0.81" 120 $strample'''''''''''''''''''' 0.63" 0.78" 30.0 0.67" 1.02" 121 1"or strample''''''''''''''''''''''''''''''''''''$	NPT* Standard NPT* Max Over Cores' D' Jacket'E' Max Noc Cores' D' Jacket'E' Max No Cores' D' Max Noet' Cores' D' Jacket'E' Max No Cores' D' Max Noet' Cores' D' Jacket'E' Max Noet' Max Noet' Jacket'E' Max Noet' Noet' Jacket'E' Max Noet' Jacket'E' Max Noet'' Jacket'E' Max Noet'' Jacket'' <	Metric Standard NPT* Max Over Cores Max Inner Max No Cores Min Max Orientation 1 Orientation 2 120 ½" 0.31" 0.32" 12.0 0.22" 0.47" 0.0315"/0.0492" 0"/0.0315" 120 ½" 0.35" 0.46" 12.0 0.22" 0.47" 0.0315"/0.0492" 0"/0.0315" 120 ½" 0.35" 0.46" 12.0 0.21" 0.63" 0.0315"/0.0492" 0"/0.0315" 120 ¼"or ½" 0.43" 0.55" 15.0 0.49" 0.81" 0.0315"/0.0492" 0"/0.0315" 120 1"or ¾" 0.63" 0.78" 30.0 0.67" 1.02" 0.0492"/0.063" 0"/0.0276" 121 1"or ¾" 0.66" 1.03" 42.0 0.87" 1.3" 0.063"/0.0787" 0"/0.0276" 123 1¼"or 1" 0.86" 1.27" 60.0 1.1" 1.61" 0.063"/0.0787" 0"/0.0276" 140 1½"or 1¼" 1.48" 1.74" 80.0	NPT* Standard NPT* Max Over Cores' D' Jacket'E' Max No Cores' D' Jacket'E' Max No Cores' D' Cores' D' Jacket'E' Max No Cores' D' Max No Cores' D' Jacket'E' Max No Cores' D' Jacket'E' Orientation 1 Orientation 2 120 $\frac{1}{2}$ " 0.31" 0.32" 0.47" 0.0315"/0.0492" 0"/0.0315" 2.3" 120 $\frac{4}{2}$ " 0.43" 0.55" 15.0 0.49" 0.63" 0.0315"/0.0492" 0"/0.0315" 2.3" 120 $\frac{4}{7}$ " 0.63" 0.78" 30.0 0.67" 1.02" 0.0492"/0.063" 0"/0.0276" 2.65" 120 $\frac{1}{7}$ " 0.86" 1.3" 0.063"/0.0787" 0"/0.0276" 2.88" 132 $\frac{1}{4}$ " 1.27" 60.0 1.1" 1.61" 0.063"/0.0784" 0"/0.0394" 3.84"	NPT* StandardNPT* Max Over Cores' D'Max Inter Jacket'E'Max No Cores' D'MinMax No Cores' D'Max No Cores' D'Max No Cores' D'MinMaxOrientation 1Orientation 2Cores' D'Accross Flats120 $/2''$ 0.31"0.32"12.00.22"0.47"0.0315"/0.0492"0"/0.0315"2.3"0.94"120 $/2''$ 0.35"0.46"12.00.37"0.63"0.0315"/0.0492"0"/0.0315"2.3"0.94"120 $/2''$ 0.43"0.55"15.00.49"0.81"0.0315"/0.0492"0"/0.0315"2.3"0.94"120 $/4''$ or $12"$ 0.43"0.55"15.00.49"0.81"0.0315"/0.0492"0"/0.0315"2.3"0.94"120 $11''$ or $34"$ 0.63"0.78"30.00.67"1.02"0.0492"/0.063"0"/0.0276"2.65"1.42"12111'' or $14''$ 0.86"1.03"42.00.87"1.3"0.063"/0.0787"0"/0.0276"2.88"1.81"1401½" or $14''$ 1.05"1.27"60.01.1"1.61"0.063"/0.0787"0"/0.0276"3.08"2.1"1401½" or $14''$ 1.64"1.74"80.01.42"2.07"0.0709"/0.0984"0"/0.0394"3.68"3.15"1401½" or $14''$ 1.93"2.20"100.01.81"2.57"0.0709"/0.0984"0"/0.0394"3.68"3.15"1413.44"1.202.24"3.07" </td

All dimensions in inches (except * where dimensions are in millietres). Os-F size metric entry threads are 1.5mm pitch as standard, 15mm length of thread.

1UL	approved	only
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Technical Data				
Type of Protection	Flameproof Exdb IIC Gb, Increased Safety Exeb IIC Gb and Dust Extb IIIC Db Ex II 2 GD			
c UL us Classification	Class I, Groups A, B, C and D; Class II, Groups E, F and G; Class III			
Area Classification	Suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and in Gas Groups IIA, IIB and IIC			
Construction & Test Standards	UL 2225, CSA C22.2 No. 174-18, UL 514B and CSA C22.2 NO. 18.3-12 , IEC/EN 60079-0, IEC/EN 60079-1, IEC/EN 60079-7 and IEC/EN 60079-31			
Ingress Protection	IP66, IP67 and IP68* (30 metres for 7 days) to IEC/EN 60529 and NEMA 4X			
Deluge Protection	to DTS01			
Operating Temperature	-50°C to +80°C (UL) and -60°C to +85°C (ATEX/IECEx)			
Alternative Certification	Options available: DNV Marine Approval, ABS Marine Approval			

Alternative Reversible Armour Clamping Ring Size Selection				
Size Ref	Orientation 1	Orientation 2		
В	0.9 - 1.25	0.5 - 0.9		
С	1.2 - 1.6	0.6 - 1.2		
C2	1.2 - 1.6	0.6 - 1.2		
D	1.45 - 1.8	1.0 - 1.45		
E	1.45 - 1.8	1.0 - 1.45		
F	1.45 - 1.8	1.0 - 1.45		





Ordering Information				
Format for ordering is as follows: Alternative Clamping Ring (AR), add suffix AR to ordering information				
Cable Gland Type	Size	Thread		
753	C	M32		
153	C	1" NPT		

Example Code: 753 C M32 EP Stainless Steel

Barrier Gland **Options**

ExPress barrier resin – a liquid injectable and fast curing resin, allowing for faster installation time than traditional 2-part compounds. Utilising a unique clear compound chamber allowing full visibility of the flameproof seal during installation and inspection, the ExPress barrier resin is unparalleled as a global solution.

QSP 2-part hand mix putty, simple to use with a cure time from 30 minutes. Particularly useful where termination space is limited or cables are running horizontally to the installation area. Can be inspected and repaired if necessary, allowing for the very highest level of safety



Cable Gland Tightening Guide

Whilst Hawke International goes to great lengths to ensure products are designed to be as simple to install, inspect and maintain as is possible, differing levels of competency, training and understanding can lead to glands being incorrectly installed. With hazardous area products, any poor installation issues can not only lead to expensive equipment failure, but also potential explosion risks and associated risk to life.

To help address issues with the overtightening of cable glands and the resultant damage to cables and seals, Hawke International has developed the patented **INBUILT TIGHTENING GUIDE**.

Without the need for fiddly measuring systems, the guide provides a permanent visual indication of the gland tightness through installation, inspection and maintenance.

How it works

The gland is permanently marked with various lines/numbers indicating the correct tightening level related to the cable diameter. Following the relevant cable gland Installation Instructions, the back seal should be tightened until a seal is formed on the cable outer sheath and then tightened one further turn.



Follow cable gland installation instructions until final stage – tightening of rear seal



Tighten backnut until a seal is formed onto the cable, then tighten one further turn



The backnut should be level with the marking guide corresponding to its diameter – this can be visually inspected and adjusted as necessary

Note: The cable gland installation instructions have a printed cable OD measure for if the cable OD is not known



