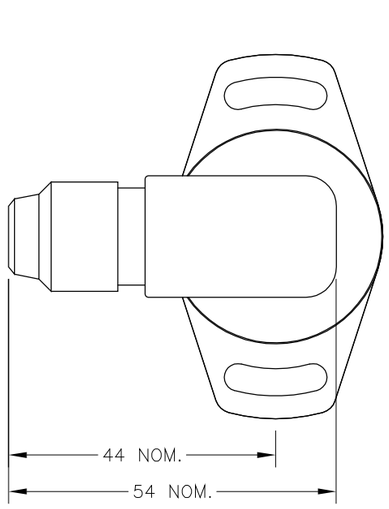
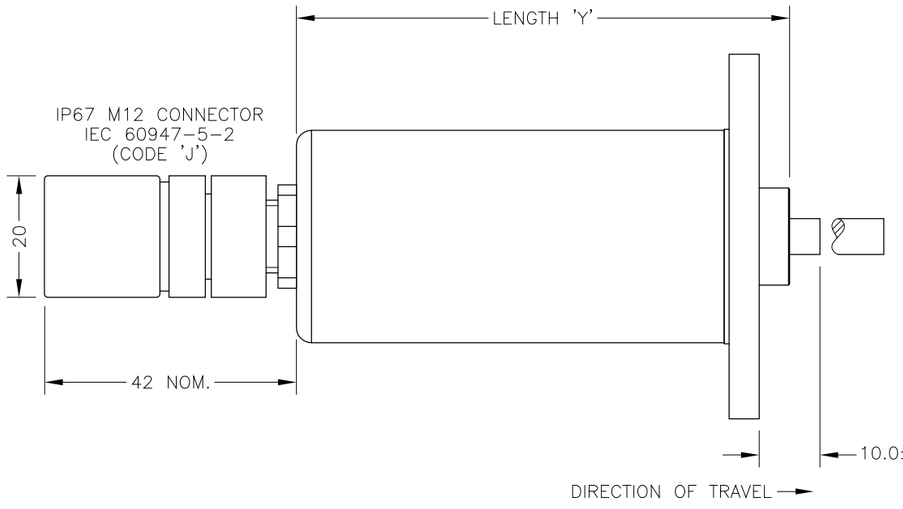
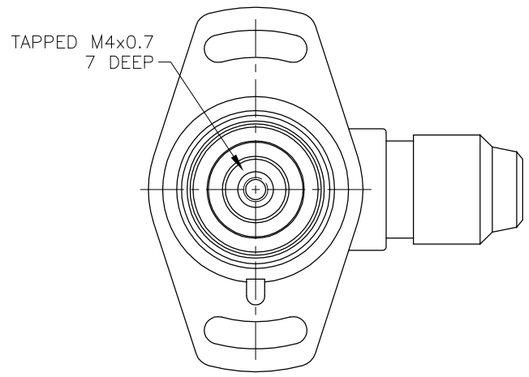






ELECTRICAL OPTIONS/ SPECIFICATIONS

OUTPUT	SUPPLY
0.5 TO 4.5V RATIOMETRIC	5V

SUPPLY CURRENT 12mA TYP. 20mA MAX.

CABLE: 0.2mm², O/A SCREEN, PUR JACKET – SUPPLIED WITH 50cm OR REQUIRED LENGTH IN cm (15000cm MAX).
STANDARD 3–CORE: JACKET ø4mm BLACK e.g. L50
OPTIONAL 5–CORE: JACKET ø4.6mm BLUE e.g. LQ50

CABLE/CONNECTOR* CONNECTIONS;

3 CORE	5 CORE	CONNECTOR	
RED	RED	:1	+Ve
–	ORG	:1	+SENSE (5–WIRE ONLY)
BLACK	BLACK	:3	0V
–	GRY	:3	–SENSE (5–WIRE ONLY)
WHITE	WHITE	:2	OUTPUT
SCREEN	SCREEN	:4	BODY

*CONNECTORS; MAXIMUM CONDUCTOR CROSS SECTION 0.75mm²

RANGE OF DISPLACEMENT FROM 0–2mm TO 0–50mm e.g.36, IN INCREMENTS OF 1mm.

BODY MATERIAL: STAINLESS STEEL.
FLANGE MATERIAL: STAINLESS STEEL (CODE 'N')

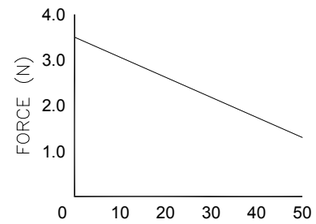
FURTHER OPTIONS:

SINGLE PAIR OF BODY CLAMPS (CODE 'P')

SPRUNG PLUNGER, TO EXTENDED POSITION (CODE 'R')

DOME END (CODE 'T') IN CONJUNCTION WITH SPRUNG PLUNGER (CODE 'R')**

PLUNGER FREE (CODE 'V')
N.b. NOT AVAILABLE WITH SPRUNG OPTIONS.



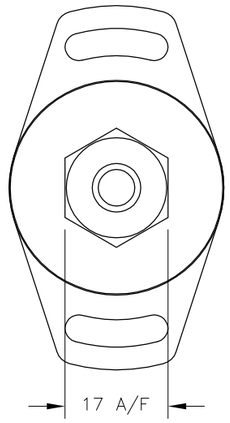
SPRING FORCE v STROKE
(CODE 'R')

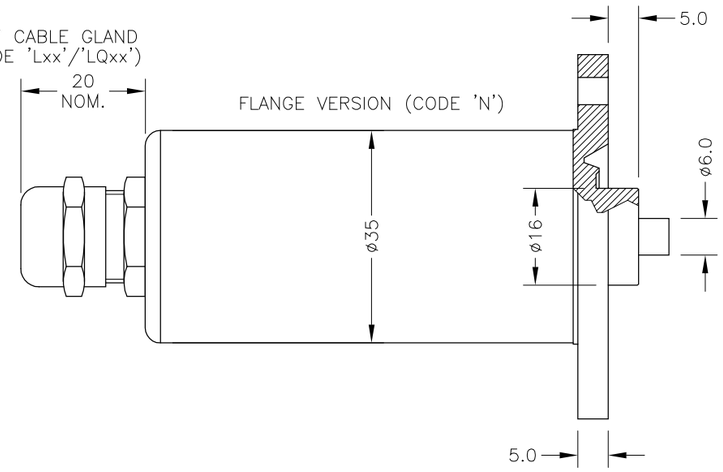
NOTE:– READ INSTALLATION SHEET M103–19 FOR FULL INSTRUCTIONS FOR USE.

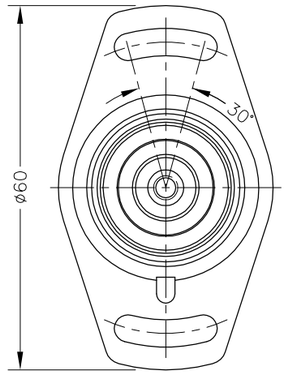
ATEX / IECEx APPROVED TO
Ⓔx I/II M1/1GD
Ex ia IIC T4 Ga (Ta= -40° to +80°C)
Ex ia IIIC T135°C Da (Ta= -40° to +80°C)
Ex ia I Ma (Ta= -40° to +80°C)
Ui 11.4V, Ii 0.2A, Pi 0.51W

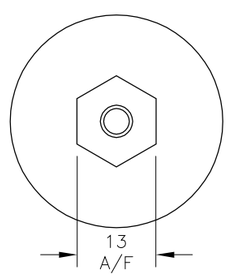
APPROVED FOR USE IN CONJUNCTION WITH A GALVANICALLY ISOLATED BARRIER.

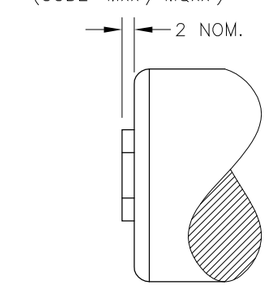
NOTE: APPROVAL ONLY APPLIES AT NORMAL ATMOSPHERIC PRESSURE!





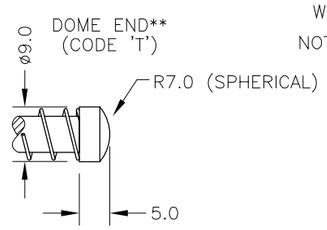






NOTE: SENSORS WITH TRAVEL UP TO 50mm ARE MADE IN STANDARD LENGTHS.

TRAVEL: (mm) CALIBRATED	MECHANICAL	BODY LENGTH: (mm) 'Y' FLANGE
0–2 TO 0–10	10	81.3
0–11 TO 0–20	20	91.3
0–21 TO 0–30	30	101.3
0–31 TO 0–50	50	121.3



H	STROKE NOTES AMENDED.	PDM
I	APPROVAL STANDARDS UPDATED - RAN465.	PDM
J	STROKE 2-10 WAS 10 - RAN1063	PDM
K	5-CORE OPTION ADDED ~ RAN1102	PDM
L	OPTION 'M' ADDED ~ RAN1166, RANGE NOTE	
	AMENDED ~ RAN1200	PDM

CE

THE PLUNGER RETRACTS 5mm FROM START OF CALIBRATED TRAVEL (2mm FOR SPRUNG VERSIONS) AND EXTENDS 9.5mm* BEYOND END OF MECHANICAL TRAVEL. *DOES NOT INCLUDE DIFFERENCE BETWEEN CALIBRATED AND MECHANICAL TRAVEL, DIMENSIONS ARE NOMINAL. 'V' CODED PLUNGER WILL DEPART SENSOR BODY.

DRAWINGS NOT TO BE CHANGED WITHOUT REFERENCE TO THE CHANGE PROCEDURE.
CHANGES TO PARTS USED IN INTRINSICALLY SAFE PRODUCT MUST BE APPROVED BY THE AUTHORISED PERSON
THIS IS AN UNCONTROLLED PRINT AND WILL NOT BE UPDATED.

POSITEK LIMITED

H	21/11/13		CHECKED BY	X ±0.4
I	10/03/14		RDS	X.X ±0.2
J	10/11/15			X.XX ±0.1
K	10/04/17			DIMS mm
L	29/08/17	DESCRIPTION		
		M103 INTRISICALLY SAFE SHORT STROKE LINEAR POSITION SENSOR		
SCALE 10mm		DRAWING NUMBER M103-11	REV L	
			SHEET 1 OF 1	