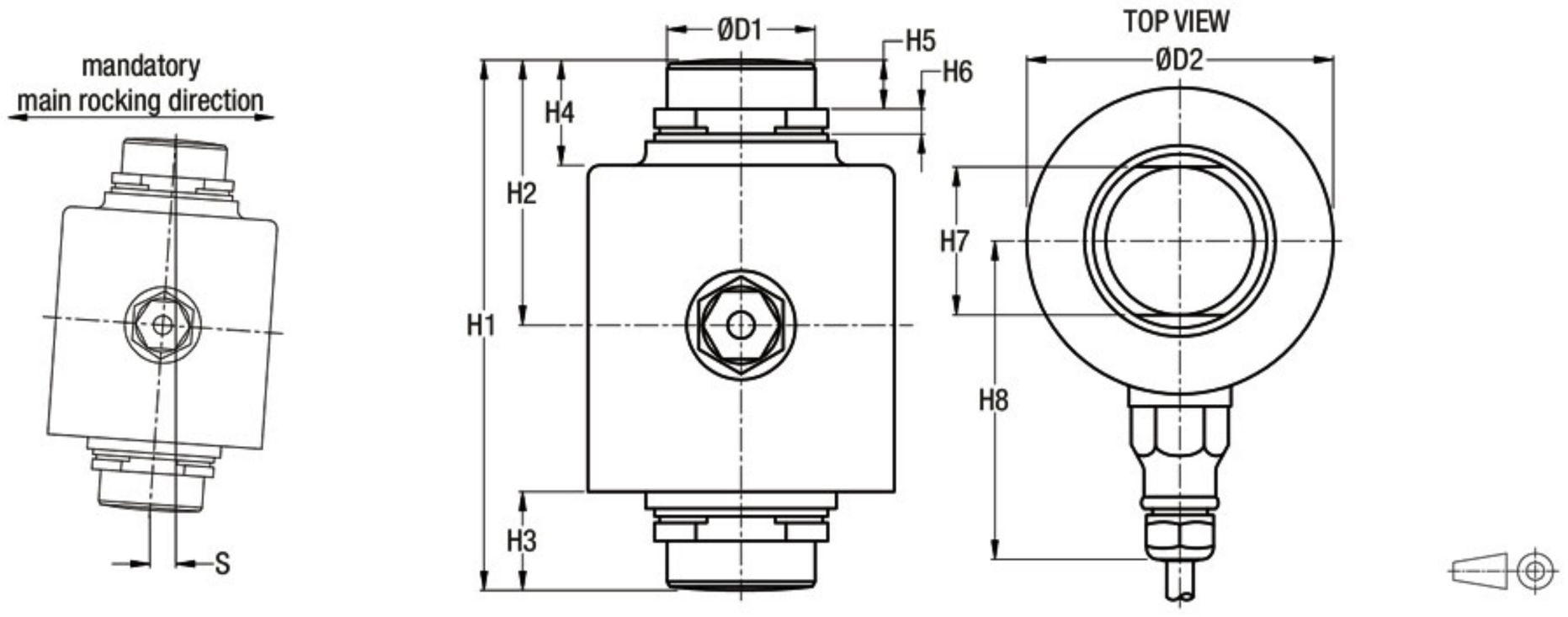
Since 1994, DIGITAL LEADER Axis Sensitive Co. Ltd

Industrial Explosion Proof Load Cell

MODEL : RC3D-EXP

제품 규격 [UNIT : mm]

Product Specification

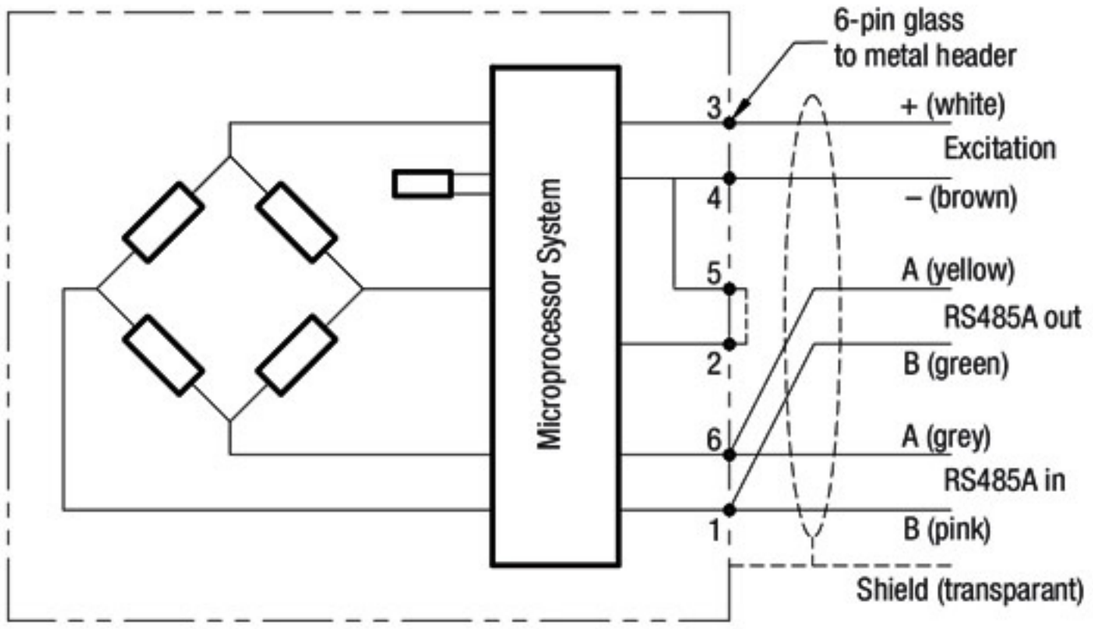


* S_{max} = maximum lateral displacement of load introduction. Recommended gap 3...5 mm.

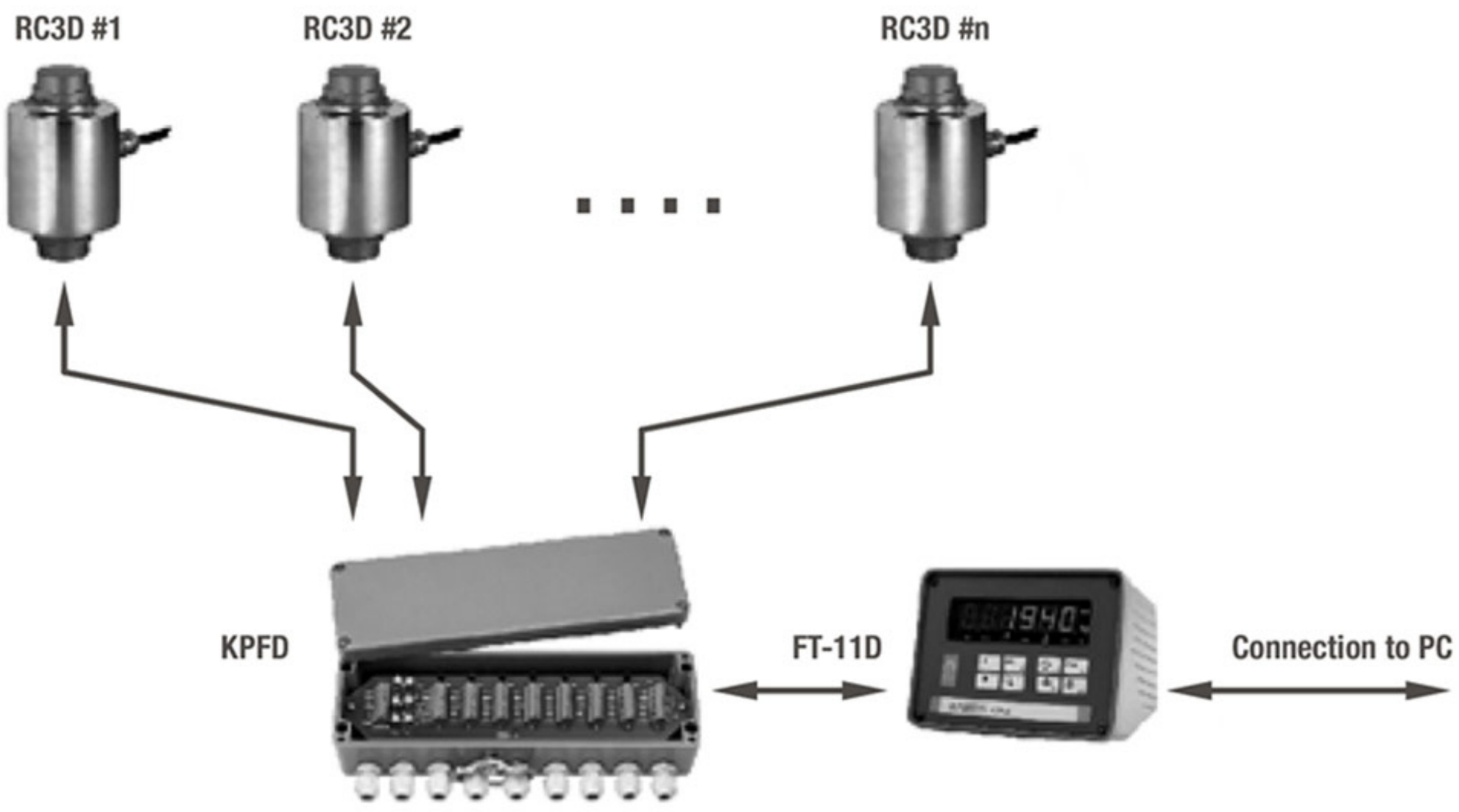
**RF = restoring force at S_{max} and E_{max}.

Type	H1	H2	H3	H4	H5	H6	H7	H8	D1	D2	S_{max}*	RF**
RC3D-30 t / 40 t	150	75	31	33	13	11.7	39	84	39	81	12	27 kN
RC3D-50 t	178	89	32	34	17	8.5	44	94	44	99	9	51 kN

- The load cell is provided with a 3x twisted pair cable (AWG 24) and shield according DIN 47 100
- Cable length: 18 m
- Cable diameter: 7.4 mm
- The shield is connected to the load cell body



- 디지털 압축 로드셀
- 디지털 로드셀은 각각의 셀과 통신 할 수 있도록 전자 장치를 내장
- 셀과 셀을 연결하여 전션 박스가 필요 없으며 설치를 단순화
- 컴팩트하고 견고하며 High-grad Stainless Steel로 제작된 밀폐형
- 열악한 환경에서도 정밀도를 보장함
- ROCKER COLUMN 설계는 로드 플레이트의 움직임으로부터 중심을 벗어나는 힘을 받을 때 최적의 계량 정확도를 보장



System Configuration with RC3D Components

Maximum capacity	(E_{max})	t	30 / 40 / 50			
Accuracy class according to OIML R60			(GP)	C1	C3	C4
Maximum number of verification intervals	(n_{LC})		n.a.	1 000	3 000	4 000
Minimum load cell verification interval	(v_{min})		n.a.	E_{max} /5 000	E_{max} /15 000	
Temperature effect on minimum dead load output	(TC_0)	%*RO/10°C	± 0.0400	± 0.0280	± 0.0093	
Temperature effect on sensitivity	(TC_{RO})	%*RO/10°C	± 0.0200	± 0.0160	± 0.0100	± 0.0080
Combined error		%*RO	± 0.0500	± 0.0300	± 0.0200	± 0.0180
Non-linearity		%*RO	± 0.0400	± 0.0300	± 0.0166	± 0.0125
Hysteresis		%*RO	± 0.0400	± 0.0300	± 0.0166	± 0.0125
Creep error (30 minutes) / DR		%*RO	± 0.0600	± 0.0490	± 0.0166	± 0.0125
Rated Output	(RO)	counts	200 000 ± 200 (± 0.1%*RO)			
Zero balance		counts	± 2000 (± 1%*RO)			
Internal resolution		counts	550 000			
Excitation voltage		V	9...12			
Current consumption		mA	40			
Converter type			Sigma-Delta ratiometric			
Conversion rate			5 Hz (3 to 80 Hertz, factory configuration only)			
Digital filter			FIR automatically adjusted to conversion rate plus Rolling Average (1, 2, 4, 8, 16, 32 samples) post filtering			
Asynchrone interface			RS485A half duplex, multidrop with network address, 2400...38400 baud Baudrate, data bits, parity and data output are programmable			
Number of bus addresses			32			
Safe load limit	(E_{lim})	%*E_{max}	200			
Ultimate load		%*E_{max}	300			
Compensated temperature range		°C	–10...+40			
Operating temperature range		°C	–40...+60			
Load cell material			stainless steel 17-4 PH (1.4548)			
Sealing			complete hermetic sealing; cable entry sealed by glass to metal header			
Protection according EN 60 529			IP68 (up to 2 m water depth) / IP69K			

The limits for Non-Linearity, Hysteresis, and TC_{RO} are typical values.
The sum of Non-linearity, Hysteresis and TC_{RO} meets the requirements according to OIML R60 with p_{LC}=0.7.

선택 사양 Option

- Range of hardware and electronics
- variery of cable and connector options

제품 특징 Features

- **High-grad Stainless Steel 구조**
- **30,40,50 ton 용량 / 정션박스 필요 없음**
- **IP 68 / 69K 등급**
- **로드셀 상태를 모니터링하는 광범위한 기능**
- **빠른 RS485통신 및 시스템 설정**
- **코너 조정 및 시스템 보정처리**
- **EN 61000-4-5에 따라 테스트된 토합 서지 프로텍터**
- **입증된 M12 커넥터 케이블을 사용한 로드셀 연결**