

## APPLICATIONS

- Industrial force measurement in small spaces.



## DESCRIPTION

Sealed and compact tension and compression sensors.

Material:

- 5930: stainless steel
- 5932: anodised aluminium alloy

Protection class: IP65

Capacities:

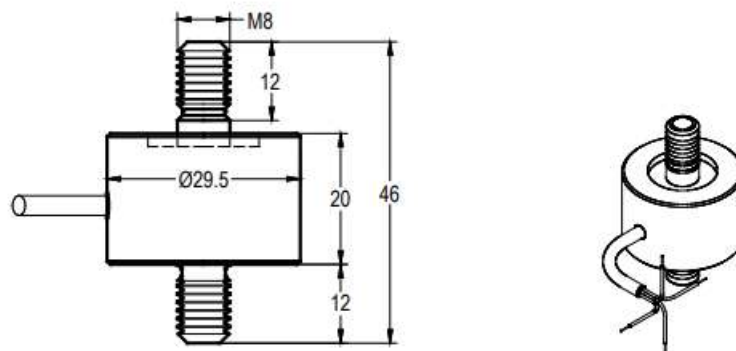
- 5930: 200 – 300 – 500 N
- 5932: 1 – (1.5) – 2 – (3) – 5 kN

**TECHNICAL FEATURES**

	1 %	
<b>Combined error (non-linearity-hysteresis)</b>	<± 1	% F.S.
<b>Repeatability error</b>	<± 0.5	% F.S.
<b>Creep error over 30 min.</b>	<± 0.25	% F.S.
<b>Zéro shift after loading</b>	<± 0.2	% F.S.
<b>Reference temperature</b>	23	°C
<b>Compensated temperature range</b>	-10...+45	°C
<b>Service temperature range</b>	-25...+70	°C
<b>Storage temperature range</b>	-50...+85	°C
<b>Temperature coefficient of the sensitivity</b>	<± 0.2	% F.S./10°C
<b>Temperature coefficient of zero signal</b>	<± 0.2	% F.S./10°C
<b>Zero balance</b>	± 0.05	mV/V
<b>Nominal sensitivity</b>	1.5	mV/V
<b>Sensitivity tolerance</b>	<± 0.3	%
<b>Input resistance</b>	1000 ± 100	ohm(s)
<b>Output resistance</b>	1000 ± 100	ohm(s)
<b>Insulation resistance (50 V)</b>	>5000	Mohm(s)
<b>Reference excitation voltage</b>	10	VDC
<b>Reference excitation voltage</b>	5	VDC
<b>Permissible nominal range of excitation voltage</b>	3..10	VDC
<b>Safe load limit</b>	120	% F.S.
<b>Breaking load</b>	> 300	% F.S.
<b>Permissible dynamic loading</b>	40	% F.S.

F.S. : Full Scale

**STANDARD DIMENSIONS**



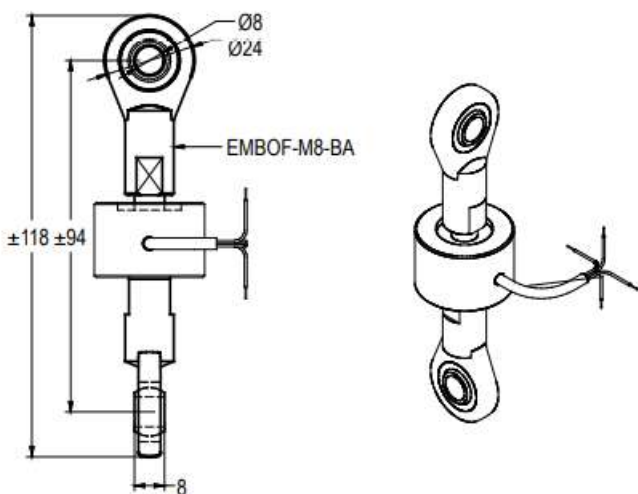
**ORDER CODE**

Ref. Item*	Capacities	Weight (kg)
5932-A	200 - 500 N (20 - 50 kg)	0.051
5930-A	1 - 5 kN (100 - 500 kg)	0.098

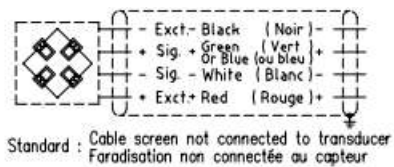
Dimensions in mm

OTHER

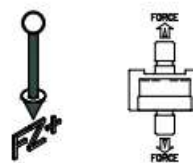
- Accessories



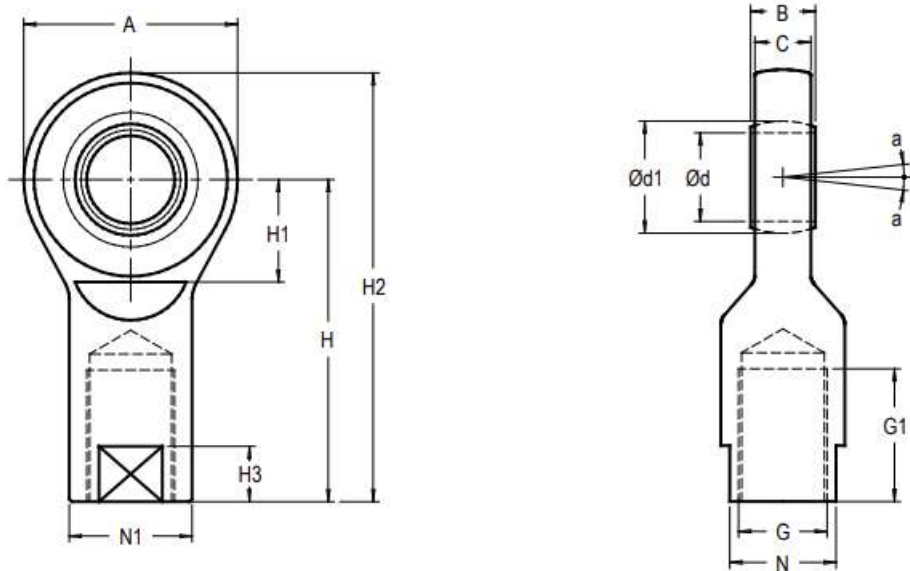
- Wiring



- Lead direction



## EMBOF STANDARD DIMENSIONS (ROD END BEARINGS WITH FEMALE THREAD)



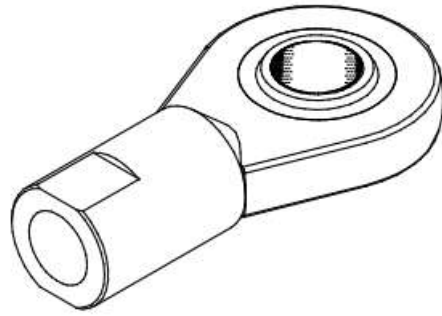
## ORDER CODE

Ref. Item*	Dimension G	Capacities (N)		Ød	A	B	C	H	a (degree)	Ød1	G1	H1	H2	H3	N	N1	Weight (kg)
		Dynamic	Static														
EMBOF-M6-BA	M6	3600	9000	6	21	6	4.3	30	13	10	11	10.5	40.5	8	9	11	0.017
EMBOF-M8-BA	M8	5850	14600	8	24	8	6	36	15	13	15	12	48	10	11	13	0.034
EMBOF-M10-BA	M10	8560	21600	10	29	9	7	43	12	16	15	14	57.5	11	14	16	0.060
EMBOF-M12-BA	M12	11400	28500	12	34	10	8	50	10	18	18	17.5	67	12	17	19	0.095
EMBOF-M16-BA	M16	22400	52000	17	46	14	11	67	10	25	24	23	90	15	22	25	0.23
EMBOF-M24x2-BA	M24x2	51000	102000	25	64	20	17	94	7	35.5	36	32	126	18	30	35	0.62
EMBOF-M30x2-BA	M30x2	65500	134000	30	73	22	19	110	6	40.7	45	35	146.5	19	36	42	0.97
EMBOF-M36x3-PTFE	M36x3	112000	143000	35	82	25	21	125	6	47	60	42	166	15	50	47	1.4
EMBOF-M45x3-PTFE	M45x3	220000	280000	50	112	35	30	160	6	66	68	60	216	20	65	62	3.55
EMBOF-M56x4-PTFE	M56x4	440000	630000	70	160	49	42	200	6	92	80	84	280	20	85	80	8.3
EMBOF-M64x4-PTFE	M64x4	570000	780000	80	180	55	47	230	6	105	85	100	320	25	100	95	13

\* Material: BA - bronze auto-lubricated; PTFE - polytetrafluoroethylene

Dimensions in mm

OTHER



*SPHEREL Systems reserves the right to make any kind of design or functional modification at any moment without prior notice .*