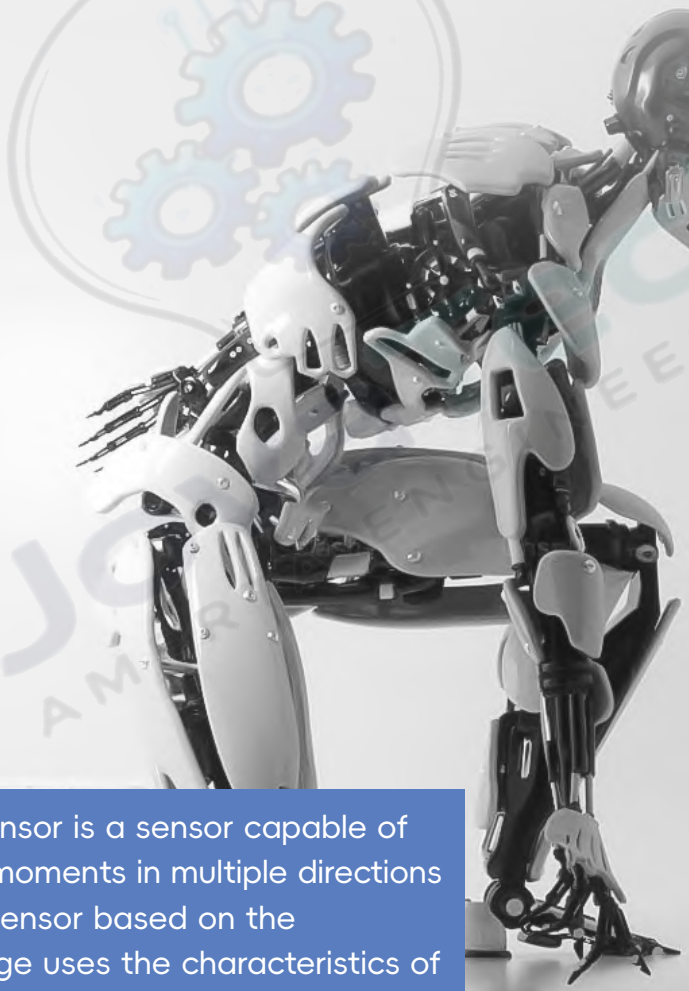
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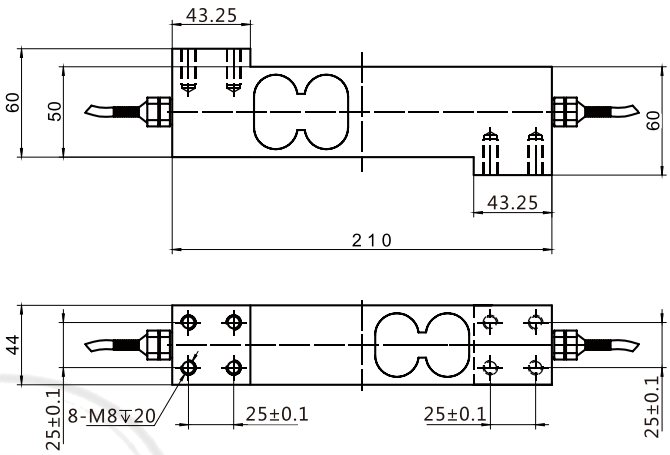
MULTI-AXIAL FORCE SENSOR



A Multi-axial force sensor is a sensor capable of measuring forces or moments in multiple directions simultaneously. The sensor based on the resistance strain gauge uses the characteristics of the resistance strain gauge to convert the force or torque into the electrical signal.

DYDW-001 Multi-axial force sensor





Product Reviews

Characteristic

A multi-component force sensor is a sensor capable of measuring forces or moments in multiple directions simultaneously. The sensor based on the resistance strain gauge uses the characteristics of the resistance strain gauge to convert the force or torque into the electrical signal.
It has high stiffness, high natural frequency, and high load tolerance, and is suitable for dynamic measurement. Compact structure, easy installation, small space. The product price is relatively high, so our company needs to provide professional calibration and maintenance guidance. Affected by temperature, humidity, electromagnetic interference and other environmental factors, need to compensate or shield. There may be crosstalk or nonlinearity in the measured signal, which can be corrected or decoupled by our company.

Application Area

- Machinery
- Robot
- Biomedical Medicine And Other Fields
- To analyze and control the mechanical properties of the objects.

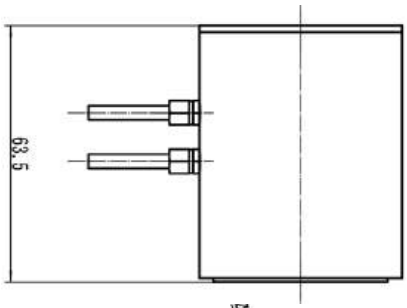
Parameters Table			
Range	0-1000kg	Material quality	Alloy Steel
Output sensitivity	1.0mV/V	Impedance	350Ω
Zero point output	±2%F.S.	Insulation resistance	≥5000MΩ/100VDC
Nolinear	0.1%F.S.	Service voltage	5-15v
Hysteresis	0.1%F.S.	Operating temperature range	-20-75°C
Repeatability	0.1%F.S.	Safe overload	150%
Creep (30 min)	0.1%F.S.	Extreme overload	300%
Temperature sensitivity drift	0.5%F.S./10°C	Cable line specifications	ϕ5x4m
Xero point temperature drift	0.05%F.S./10°C	Cable limit tension	10kg
Response frequency	10kHz	TEDS	

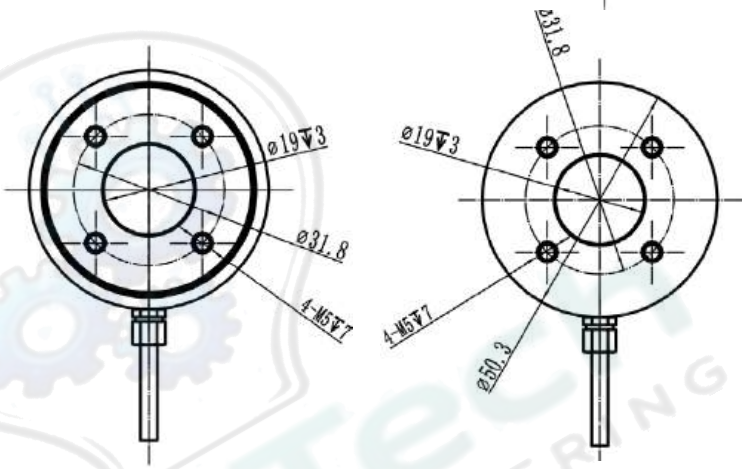
Force Direction	Range (kg)				
X	50	100	200	500	1000
Y	50	100	200	500	1000

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DYDW-002 Multi-axial force sensor





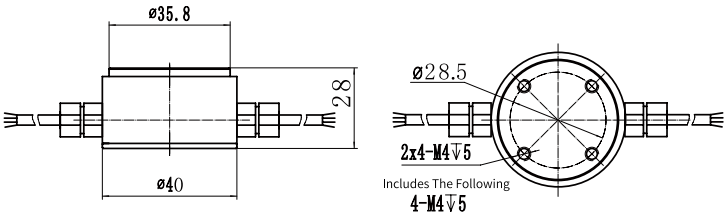


Parameters Table			
Range	3-60N.m 100-2000N	Material Quality	Aluminium Alloy/Alloy Steel
Output Sensitivity	2mV/V	Impedance	350Ω
Zero Point Output	±0.25%F.S.	Insulation Resistance	≥5000MΩ/100VDC
Nolinear	±0.25%F.S.	Service Voltage	5-15v
Hysteresis	±0.25%F.S.	Operating Temperature Range	-20-75℃
Repetitiveness	±0.25%F.S.	Safe Overload	150%
Creep (30 min)	0.1%F.S.	Extreme Overload	300%
Temperature Sensitivity Drift	0.5%F.S./10℃	Cable Line Specifications	Φ4x3m
Xero Point Temperature Drift	±0.005%F.S./10℃	Cable Limit Tension	10kg
Response Frequency	10kHz	TEDS	

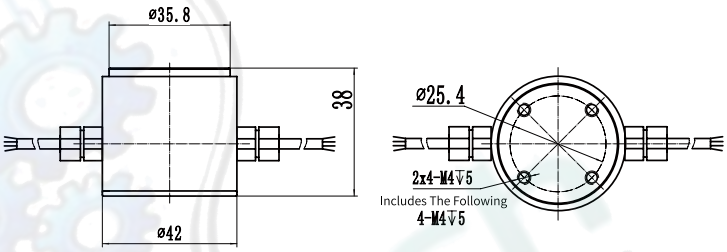
Range						
Pull Pressure Range	Fz (N)	100	200	500	1000	2000
Torque Force Process	M(N.m)	3	6	15	20	60

DYDW-003 Multi-axial force sensor





Range					
Pull Pressure Range	Fz (N)	10	50	100	300
Torque Force Process	M(N.m)	1	2	3	



Range			
Pull Pressure Range	Fz (N)	500	1000
Torque Force Process	M(N.m)	5	10 30 50

Product Reviews

Characteristic

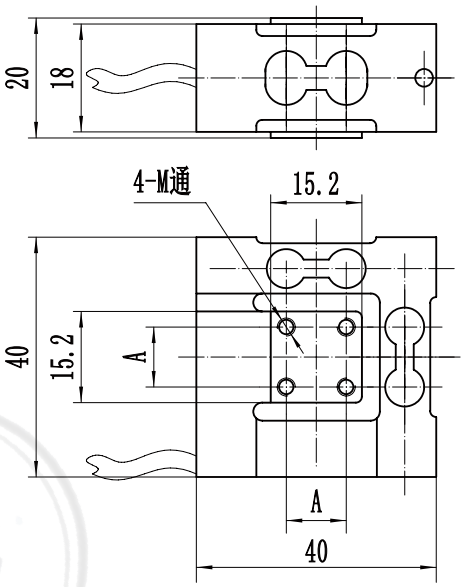
A pressure-torsion sensor is a sensor capable of measuring both pressure and torque. It can be used to measure the force and torque during drilling, cutting, screws and tightening, or to measure the torsional characteristics of springs, bearings, clutch and other components.

Parameters Table			
Range	1-50N.m 50-1000N	Material quality	Alloy Steel
Output sensitivity	2.0±10%mV/V	Impedance	350Ω
Zero point output	±2%F.S.	Insulation resistance	≥5000MΩ/100VDC
Nolinear	0.1%F.S.	Service voltage	5-10v
Hysteresis	0.1%F.S.	Operating temperature range	-20-80℃
Repeatability	0.1%F.S.	Safe overload	120%
Creep (30 min)	0.05%F.S.	Extreme overload	200%
Temperature sensitivity drift	0.05%F.S./10℃	Cable line specifications	ф3x2m
Xero point temperature drift	0.05%F.S./10℃	Cable limit tension	10kg
Response frequency	10kHz	TEDS	

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DYDW-004 Multi-axial force sensor





Product Reviews

Characteristic

A multi-component force sensor is a sensor capable of measuring forces or moments in multiple directions simultaneously. The sensor based on the resistance strain gauge uses the characteristics of the resistance strain gauge to convert the force or torque into the electrical signal.
It has high stiffness, high natural frequency, and high load tolerance, and is suitable for dynamic measurement. Compact structure, easy installation, small space. The product price is relatively high, so our company needs to provide professional calibration and maintenance guidance. Affected by temperature, humidity, electromagnetic interference and other environmental factors, need to compensate or shield. There may be crosstalk or nonlinearity in the measured signal, which can be corrected or decoupled by our company.

Application Area

- Machinery
- Robot
- Biomedical Medicine And Other Fields
- To analyze and control the mechanical properties of the objects.

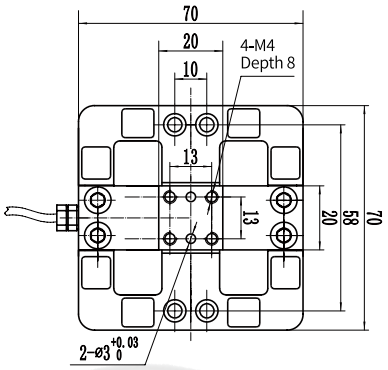
Parameters Table			
Range	5-100kg	Material quality	Aluminium Alloy/Alloy Steel
Output sensitivity	1.0-1.5mV/V	Impedance	350Ω
Zero point output	±2%F.S.	Insulation resistance	≥5000MΩ/100VDC
Nolinear	0.3%F.S.	Service voltage	5-15V
Hysteresis	1.0%F.S.	Operating temperature range	-20-80°C
Repeatability	0.05%F.S.	Safe overload	120%
Creep (30 min)	0.05%F.S.	Extreme overload	150%
Temperature sensitivity drift	0.5%F.S	Cable line specifications	ϕ3x2m
Xero point temperature drift	0.05%F.S./10°C	Cable limit tension	10kg
Response frequency	10kHz	TEDS	

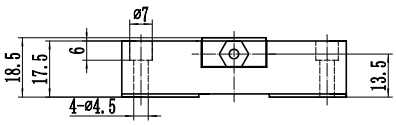
Range (kg)	A	M
5-20	10	M3
30-100	9	M4

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DYDW-005 Multi-axial force sensor

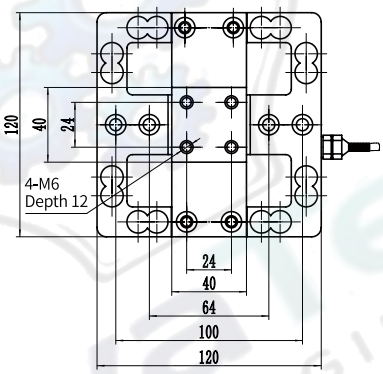


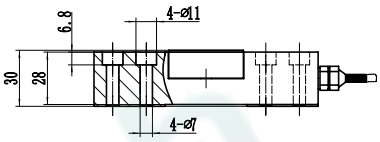




Force Direction Range (N)	
X Y Z	100/200/500







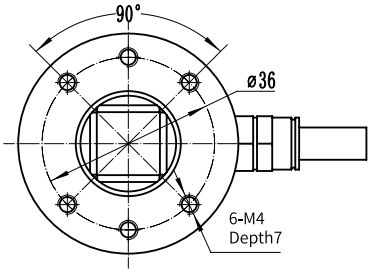
Force Direction Range (N)	
X Y Z	1000/2000/5000

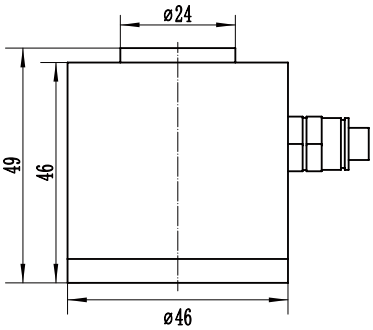
Parameters Table			
Range	100-5000N	Material quality	Aluminium Alloy/Alloy Steel
Output sensitivity	1.0-2.0mV/V	Impedance	700Ω
Zero point output	±2%F.S.	Insulation resistance	≥5000MΩ/100VDC
Nolinear	0.3%F.S.	Service voltage	5-15V
Hysteresis	0.1%F.S.	Operating temperature range	-20-75℃
Repeatability	0.1%F.S.	Safe overload	150%
Creep (30 min)	0.3%F.S.	Extreme overload	200%
Temperature sensitivity drift	0.5%F.S.	Cable line specifications	⩽ 500N：1 line Φ3*5m
Xero point temperature drift	0.1%F.S./10℃	Cable limit tension	＞ 500N 3 lines Φ3*5m
Response frequency	10kHz	TEDS	

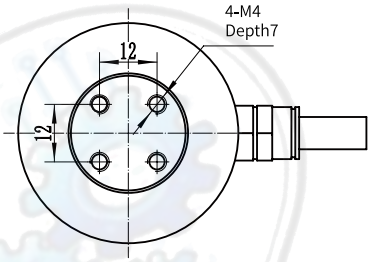
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DYDW-006 Multi-axial force sensor









Force DirectionRange (N)	
X	5/10/20/50
Y	5/10/20/50
Z	5/10/20/50/100

Product Reviews

Characteristic

A multi-component force sensor is a sensor capable of measuring forces or moments in multiple directions simultaneously. The sensor based on the resistance strain gauge uses the characteristics of the resistance strain gauge to convert the force or torque into the electrical signal.
It has high stiffness, high natural frequency, and high load tolerance, and is suitable for dynamic measurement. Compact structure, easy installation, small space. The product price is relatively high, so our company needs to provide professional calibration and maintenance guidance. Affected by temperature, humidity, electromagnetic interference and other environmental factors, need to compensate or shield. There may be crosstalk or nonlinearity in the measured signal, which can be corrected or decoupled by our company.

Application Area

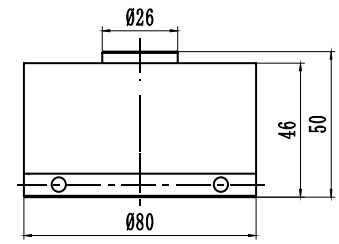
- Machinery
- Robot
- Biomedical Medicine And Other Fields
- To analyze and control the mechanical properties of the objects.

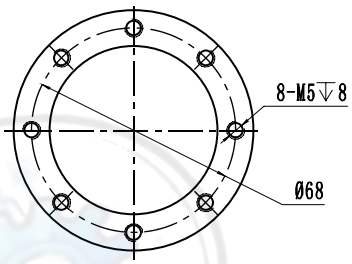
Parameters Table			
Range	5-100kg	Material quality	Alloy Steel
Output sensitivity	1.0±10%mV/V	Impedance	700Ω
Zero point output	±2%F.S.	Insulation resistance	≥5000MΩ/100VDC
Nolinear	0.5%F.S.	Service voltage	5-10V
Hysteresis	0.2%F.S.	Operating temperature range	-20-80°C
Repeatability	0.2%F.S.	Safe overload	120%
Creep (30 min)	0.1%F.S.	Extreme overload	200%
Temperature sensitivity drift	2%F.S.	Cable line specifications	ϕ6x3m
Xero point temperature drift	0.5%F.S./10°C	Cable limit tension	10kg
Response frequency	0.05%F.S./10°C	TEDS	

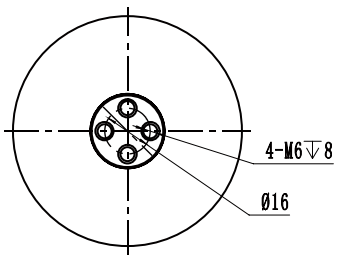
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DYDW-007 Multi-axial force sensor









Product Reviews

Characteristic

A multi-component force sensor is a sensor capable of measuring forces or moments in multiple directions simultaneously. The sensor based on the resistance strain gauge uses the characteristics of the resistance strain gauge to convert the force or torque into the electrical signal.
It has high stiffness, high natural frequency, and high load tolerance, and is suitable for dynamic measurement. Compact structure, easy installation, small space. The product price is relatively high, so our company needs to provide professional calibration and maintenance guidance. Affected by temperature, humidity, electromagnetic interference and other environmental factors, need to compensate or shield. There may be crosstalk or nonlinearity in the measured signal, which can be corrected or decoupled by our company.

Application Area

- Machinery
- Robot
- Biomedical medicine and other fields
- To analyze and control the mechanical properties of the objects.

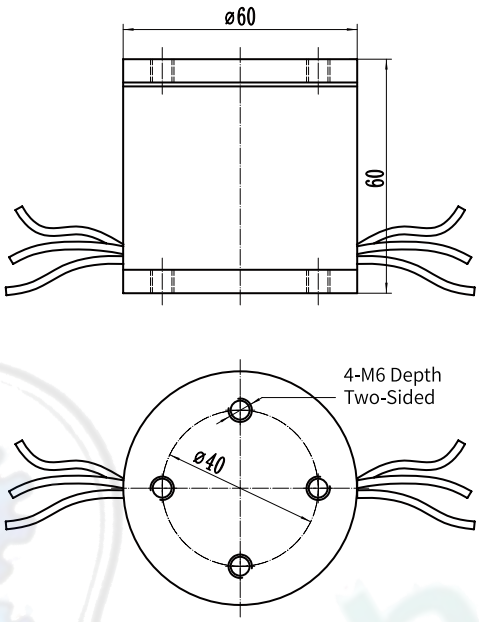
Parameters Table			
Range	0-1000kg	Material quality	Alloy Steel
Output sensitivity	1.0mV/V	Impedance	350/700/1400Ω
Zero point output	±2%F.S.	Insulation resistance	≥5000MΩ/100VDC
Nolinear	0.1%F.S.	Service voltage	5-12V
Hysteresis	0.1%F.S.	Operating temperature range	-20-75°C
Repeatability	0.5%F.S.	Safe overload	150%
Creep (30 min)	0.5%F.S.	Extreme overload	300%
Temperature sensitivity drift	0.5%F.S.	Cable line specifications	ϕ3x4m
Xero point temperature drift	0.05%F.S./10°C	Cable limit tension	10kg
Response frequency	10kHz	TEDS	

Force Direction Range (kg)		Torque Force Range (N.m)	
X Y Z	50/200/500/1000	X	10/50/100/300/500

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DYDW-008 Multi-axial force sensor





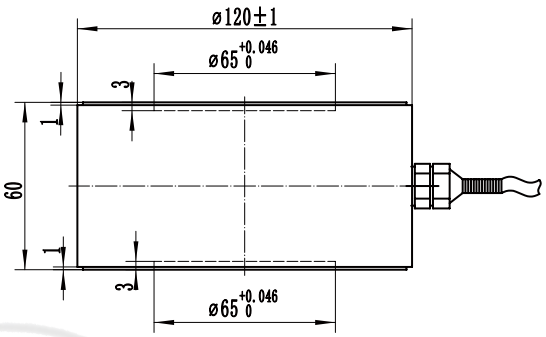
Parameters Table			
Range	300N 10N.m	Safe overload	200%F.S.
Operating temperature range	-20℃~60℃	Insulation resistance	≥5000MΩ (50V DC)
Input resistance	350/700±20Ω	Service voltage	10-15V
Output resistance	350/700±5Ω		

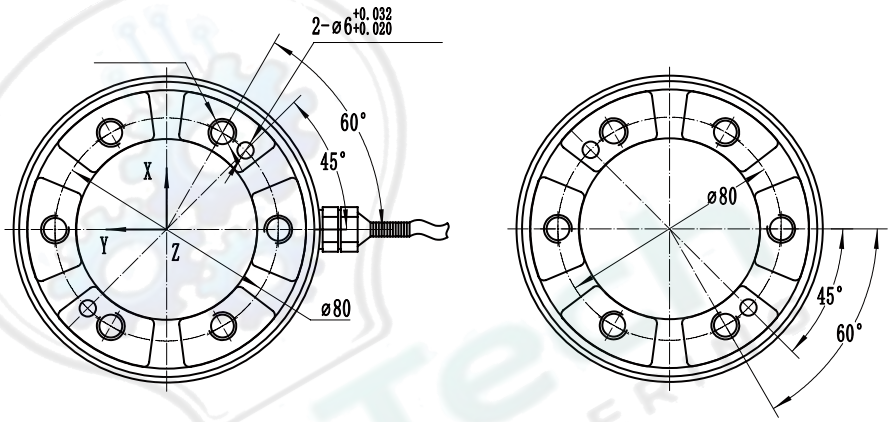
Parameters Table							
		Fx	Fy	Fz	Nx	Ny	Nz
Sensitivity	mV/V	0.5-1.0	0.5-1.0	0.5-1.0	0.5-1.0	0.5-1.0	0.5-1.0
Nolinear	%F.S.	±0.5	±0.5	±0.5	±0.5	±0.5	±0.5
Hysteresis	%F.S.	±0.3	±0.3	±0.3	±0.3	±0.3	±0.3
Repeatability	%F.S.	±0.3	±0.3	±0.3	±0.3	±0.3	±0.3
Interdimensional coupling error	%F.S.	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1
Creep (30 min)	%F.S.	±0.5	±0.5	±0.5	±0.5	±0.5	±0.5
Zero point output	%F.S.	±1	±1	±1	±1	±1	±1
Zero point temperature drift	%F.S./10℃	±0.01	±0.01	±0.01	±0.01	±0.01	±0.01
Sensitivity temperature coefficient	%F.S./10℃	±0.3	±0.3	±0.3	±0.3	±0.3	±0.3

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DYDW-009 Multi-axial force sensor







Parameters Table			
Range	10kN/750N.m	Material quality	Stainless Steel
Output sensitivity	1.0mV/V	Impedance	350/700/1400Ω
Zero point output	0.1%F.S.	Insulation resistance	≥5000MΩ/100VDC
Nolinear	0.1%F.S.	Service voltage	5-12V
Hysteresis	0.1%F.S.	Operating temperature range	-20-75℃
Repeatability	0.1%F.S.	Safe overload	150%
Creep (30 min)	0.1%F.S.	Extreme overload	300%
Temperature sensitivity drift	0.05%F.S.	Cable line specifications	ϕ5x4m
Xero point temperature drift	0.05%F.S./10℃	Cable limit tension	10kg
Response frequency	10kHz	TEDS	

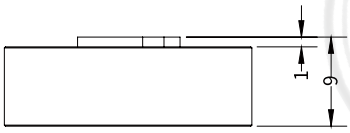
Force Direction Range (kN)						
X	1	3	5	10	20	50
Y	1	3	5	10	20	50
Z	2	5	10	20	40	100

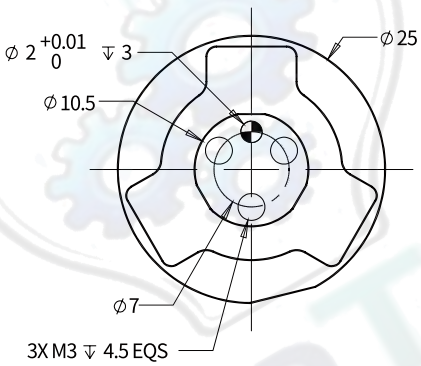
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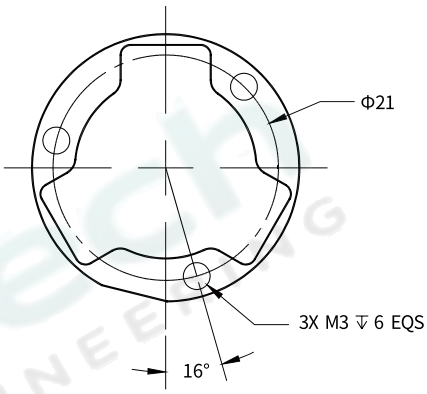
DYDW-γ25 Multi-axial force sensor











Product Reviews

Characteristic

Made of high strength high quality 17-4PH stainless steel, with yield strength, high overload capacity. The international high standard strain gauge chip can achieve high resolution, high response frequency and high test accuracy. 100% autonomous structure design, factory carefully tested, coupling accuracy is extremely high. A variety of communication interface protocols can be selected, basically covering domestic and foreign mainstream collaborative robot interfaces. Provide debugging software or test software. Flexible cable with high bending resistance.

Application Area

- Rehabilitation Medical Equipment
- Biobiomimetic Experiments
- Vehicle Lift Test
- Machine human control grinding, assembly, dragging teaching and various scientific research.

γ25 Series Common Specification Model				
Model		γ25-20NX6	γ25-50NX6	γ25-200NX6
Range	Fx/Fy/Fz	20N/20N/20N	50N/50N /50N	100N/100N/100N
	Tx/Ty/Tz	0.5N.m	2N.m	5N.m

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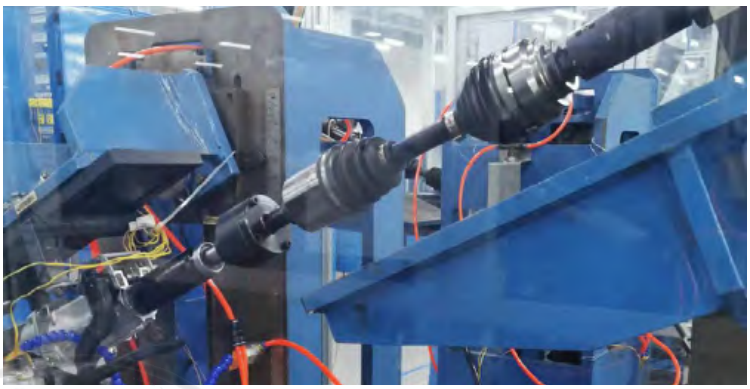
DYDW-γ25 Multi-axial force sensor

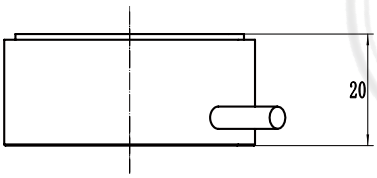
Parameters Table	
Mechanical Features	
Weight	~55g
Material quality	Aluminium Alloy/Stainless Steel
Size	Φ25mm×9mm
Levels Of Protection	IP65
Overload Capacity	300%F.S
Stiffness (Calculation)	Fx 1.6x10^7 N/m
	Fy 1.6x10^7 N/m
	Fz 1.3x10^7 N/m
	Tx 6059.99Nm/rad
	Ty 6059.99Nm/rad
	Tz 10056.99Nm/rad
Electrical Features	
Input / Output Impedance	350 Ω
Communication Interface	Mv matrix
Working Voltage	5-15V DC
Cable Length	5m
Accuracy Class	
Resolution Ratio	Better than 0.1%FS
Nolinear	Better than 0.2%FS
Accuracy	Better than 0.3%FS
Repeatability	Better than 0.2%FS
Coupling Accuracy	Better than 1.5%FS
Hysteresis Accuracy	Better than 0.3%FS
Temperature Features	
Temperature Zero Drift	0.2%F.S/10℃
Zero Drift	0.1%F.S/30min
Storage Temperature	-25℃ ~ 70℃
Service Environment	0℃ ~ 40℃, 20 ~ 80% RH
Extended Interface	0±10v, /Ethercat,/Modbus-TCP,/Ethernet,/Canopen,/Modbus-RTU

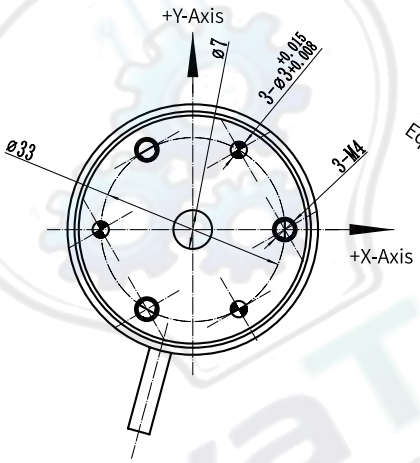
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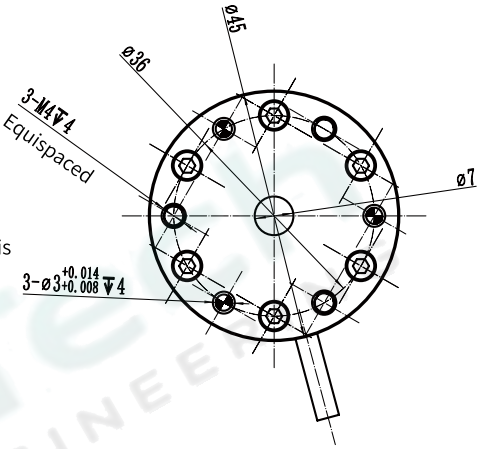
DYDW-γ45 Multi-axial force sensor











Product Reviews

Characteristic

Made of high strength high quality 17-4PH stainless steel, with yield strength, high overload capacity. The international high standard strain gauge chip can achieve high resolution, high response frequency and high test accuracy. 100% autonomous structure design, factory carefully tested, coupling accuracy is extremely high. A variety of communication interface protocols can be selected, basically covering domestic and foreign mainstream collaborative robot interfaces. Provide debugging software or test software. Flexible cable with high bending resistance.

Application Area

- Rehabilitation Medical Equipment
- Biobiomimetic Experiments
- Vehicle Lift Test
- Machine human control grinding, assembly, dragging teaching and various scientific research.

γ45 Series Common Specification Model				
Model		γ45-20NX6	γ45-50NX6	γ45-200NX6
Range	Fx/Fy/Fz	20N/20N/20N	50N/50N/50N	200N/200N/200N
	Tx/Ty/Tz	0.5N.m	2N.m	5N.m

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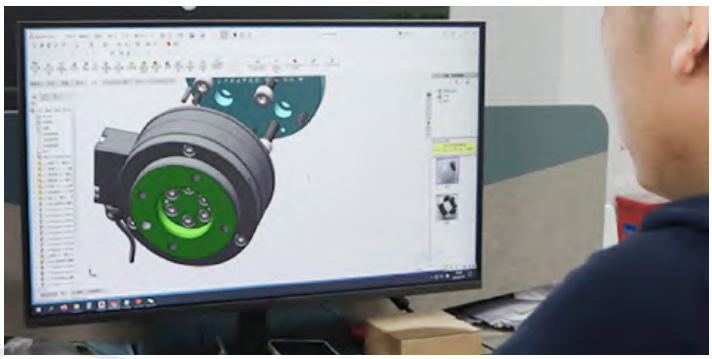
DYDW-γ45 Multi-axial force sensor

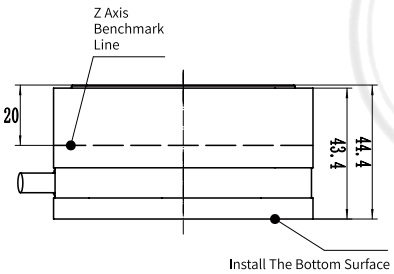
Parameters Table	
Mechanical Features	
Weight	~140g
Material quality	Aluminium Alloy/17-4PH
Size	Φ45mm×20mm
Levels Of Protection	IP65
Overload Capacity	300%F.S
Stiffness (Calculation)	Fx 1.6x10^7 N/m
	Fy 1.6x10^7 N/m
	Fz 1.3x10^7 N/m
	Tx 6059.99Nm/rad
	Ty 6059.99Nm/rad
	Tz 10056.99Nm/rad
Electrical Features	
Input / Output Impedance	350 Ω
Communication Interface	Mv matrix
Working Voltage	5-15V DC
Cable Length	5m
Accuracy Class	
Resolution Ratio	Better than 0.1%FS
Nolinear	Better than 0.2%FS
Accuracy	Better than 0.3%FS
Repeatability	Better than 0.2%FS
Coupling Accuracy	Better than 1.5%FS
Hysteresis Accuracy	Better than 0.3%FS
Temperature Features	
Temperature Zero Drift	0.2%F.S/10℃
Zero Drift	0.1%F.S/30min
Storage Temperature	-25℃ ~ 70℃
Service Environment	0℃ ~ 40℃，20 ~ 80% RH
Extended Interface	0±10v, /Ethercat,/Modbus-TCP,/Ethernet,/Canopen,/Modbus-RTU

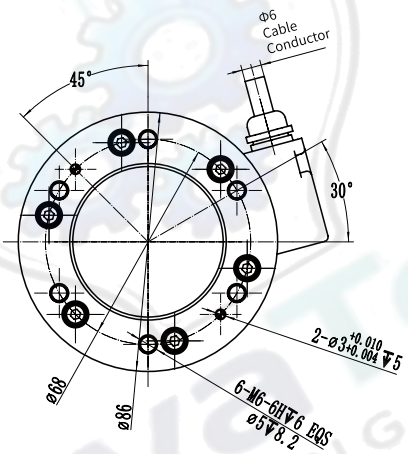
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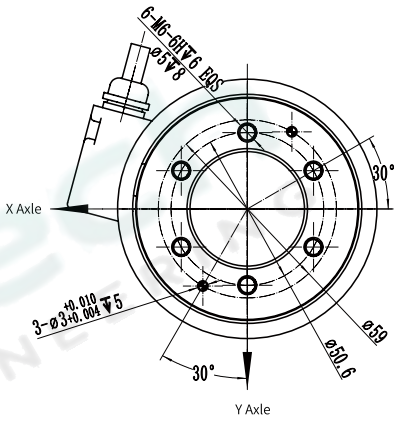
DYDW-γ74 Multi-axial force sensor











Product Reviews

Characteristic

Made of high strength high quality 17-4PH stainless steel, with yield strength, high overload capacity. The international high standard strain gauge chip can achieve high resolution, high response frequency and high test accuracy. 100% autonomous structure design, factory carefully tested, coupling accuracy is extremely high. A variety of communication interface protocols can be selected, basically covering domestic and foreign mainstream collaborative robot interfaces. Provide debugging software or test software. Flexible cable with high bending resistance.

Application Area

- Rehabilitation Medical Equipment
- Biobiomimetic Experiments
- Vehicle Lift Test
- Machine human control grinding, assembly, dragging teaching and various scientific research.

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DYDW-γ74 Multi-axial force sensor

Parameters Table	
Mechanical Features	
Weight	~800g
Material quality	Stainless Steel/17-4PH
Size	Φ125mm×67.5mm
Levels Of Protection	IP65
Overload Capacity	300%F.S
Stiffness (Calculation)	Fx 1.6x10^7 N/m
	Fy 1.6x10^7 N/m
	Fz 1.3x10^7 N/m
	Tx 6059.99Nm/rad
	Ty 6059.99Nm/rad
	Tz 10056.99Nm/rad
Electrical Features	
Input / Output Impedance	350 Ω
Communication Interface	Mv matrix
Working Voltage	5-15V DC
Cable Length	5m
Accuracy Class	
Resolution Ratio	Better than 0.1%FS
Nolinear	Better than 0.2%FS
Accuracy	Better than 0.3%FS
Repeatability	Better than 0.2%FS
Coupling Accuracy	Better than 1.5%FS
Hysteresis Accuracy	Better than 0.3%FS
Temperature Features	
Temperature Zero Drift	0.2%F.S/10℃
Zero Drift	0.1%F.S/30min
Storage Temperature	-25℃~70℃
Service Environment	0℃~40℃，20~80% RH
Extended Interface	0±10v, /Ethercat,/Modbus-TCP,/Ethernet,/Canopen,/Modbus-RTU

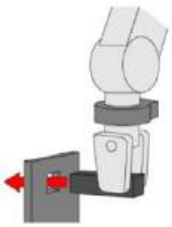
γ74 Series Common Specification Model

γ74	Fxy (N)	Fz (N)	Mxy (Nm)	Mz (Nm)	Weight (kg)	Flange Size
50NX6	50	50	1	1	1.2	Φ86
100NX6	100	100	2	2	1.2	Φ86
200NX6	200	200	5	5	1.2	Φ86
500NX6	500	500	10	10	1.2	Φ86
1kNX6	1000	1000	20	20	1.2	Φ86
2kNX6	2000	2000	50	50	1.2	Φ86
5KNX6	5000	5000	100	100	1.2	Φ86

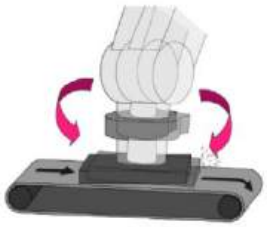
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DYDW-γ80 Multi-axial force sensor





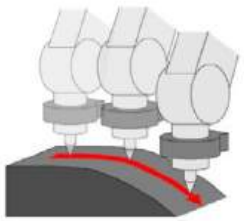
Assemble



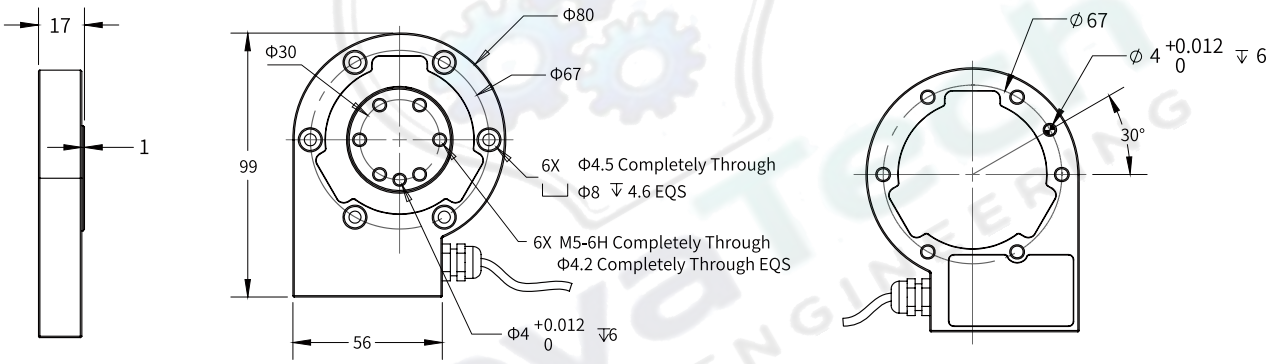
Polishing



Screw Home



Find The Outline



Product Reviews

Characteristic

Made of high strength high quality 17-4PH stainless steel, with yield strength, high overload capacity. The international high standard strain gauge chip can achieve high resolution, high response frequency and high test accuracy. 100% autonomous structure design, factory carefully tested, coupling accuracy is extremely high. A variety of communication interface protocols can be selected, basically covering domestic and foreign mainstream collaborative robot interfaces. Provide debugging software or test software. Flexible cable with high bending resistance.

Application Area

- Rehabilitation Medical Equipment
- Biobiomimetic Experiments
- Vehicle Lift Test
- Machine human control grinding, assembly, dragging teaching and various scientific research.

γ80 Series Common Specification Model				
Model		γ80-50NX6	γ80-200NX6	γ80-500NX6
Range	Fx/Fy/Fz	50N/50N/50N	200N/200N/200N	500N/500N/500N
	Tx/Ty/Tz	2N.m	5N.m	10N.m

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DYDW-γ80 Multi-axial force sensor

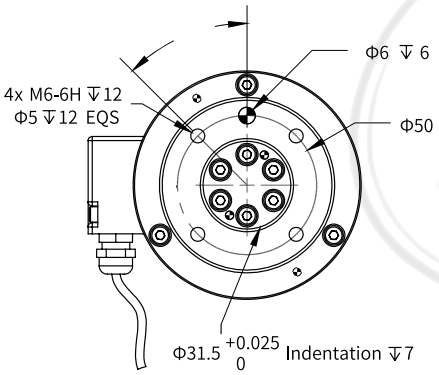
Parameters Table	
Mechanical Features	
Weight	~220g
Material quality	Aluminium Alloy
Size	Φ80mm×17mm
Levels Of Protection	IP65
Overload Capacity	300%F.S
Stiffness (Calculation)	Fx 1.6x10^7 N/m
	Fy 1.6x10^7 N/m
	Fz 1.3x10^7 N/m
	Tx 6059.99Nm/rad
	Ty 6059.99Nm/rad
	Tz 10056.99Nm/rad
Electrical Features	
Input / Output Impedance	350 Ω
Communication Interface	Mv matrix
Working Voltage	5-15V DC
Cable Length	5m
Accuracy Class	
Resolution Ratio	Better than 0.1%FS
Nolinear	Better than 0.2%FS
Accuracy	Better than 0.3%FS
Repeatability	Better than 0.2%FS
Coupling Accuracy	Better than 1.5%FS
Hysteresis Accuracy	Better than 0.3%FS
Temperature Features	
Temperature Zero Drift	0.2%F.S/10℃
Zero Drift	0.1%F.S/30min
Storage Temperature	-25℃~70℃
Service Environment	0℃~40℃，20~80% RH
Extended Interface	0±10v, /Ethercat,/Modbus-TCP,/Ethernet,/Canopen,/Modbus-RTU

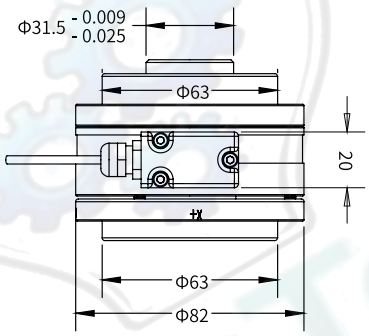
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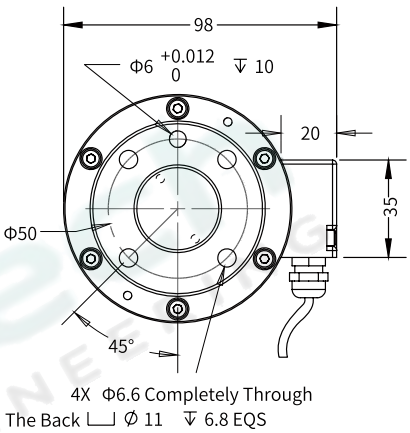
DYDW-γ82 Multi-axial force sensor











Product Reviews

Characteristic

Made of high strength high quality 17-4PH stainless steel, with yield strength, high overload capacity. The international high standard strain gauge chip can achieve high resolution, high response frequency and high test accuracy. 100% autonomous structure design, factory carefully tested, coupling accuracy is extremely high. A variety of communication interface protocols can be selected, basically covering domestic and foreign mainstream collaborative robot interfaces. Provide debugging software or test software. Flexible cable with high bending resistance.

Application Area

- Rehabilitation Medical Equipment
- Biobiomimetic Experiments
- Vehicle Lift Test
- Machine human control grinding, assembly, dragging teaching and various scientific research.

γ82 Series Common Specification Model				
Model		γ82-50NX6	γ82-200NX6	γ82-500NX6
Range	Fx/Fy/Fz	50N/50N/50N	200N/200N/200N	500N/500N/500N
	Tx/Ty/Tz	2N.m	10N.m	20N.m

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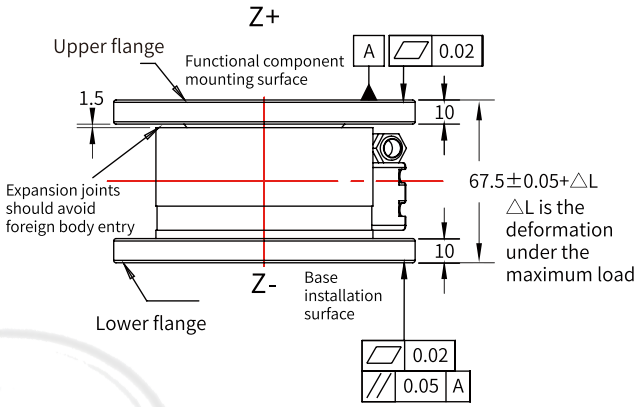
DYDW-γ82 Multi-axial force sensor

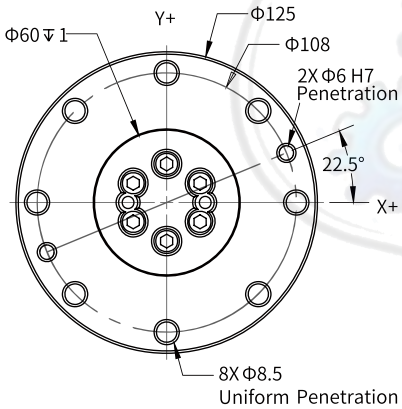
Parameters Table	
Mechanical Features	
Weight	~220g
Material quality	Aluminium Alloy
Size	Φ80mm×17mm
Levels Of Protection	IP65
Overload Capacity	300%F.S
Stiffness (Calculation)	Fx 1.6x10^7 N/m
	Fy 1.6x10^7 N/m
	Fz 1.3x10^7 N/m
	Tx 6059.99Nm/rad
	Ty 6059.99Nm/rad
	Tz 10056.99Nm/rad
Electrical Features	
Input / Output Impedance	350 Ω
Communication Interface	Mv matrix
Working Voltage	5-15V DC
Cable Length	5m
Accuracy Class	
Resolution Ratio	Better than 0.1%FS
Nolinear	Better than 0.2%FS
Accuracy	Better than 0.3%FS
Repeatability	Better than 0.2%FS
Coupling Accuracy	Better than 1.5%FS
Hysteresis Accuracy	Better than 0.3%FS
Temperature Features	
Temperature Zero Drift	0.2%F.S/10℃
Zero Drift	0.1%F.S/30min
Storage Temperature	-25℃~70℃
Service Environment	0℃~40℃，20~80% RH
Extended Interface	0±10v, /Ethercat,/Modbus-TCP,/Ethernet,/Canopen,/Modbus-RTU

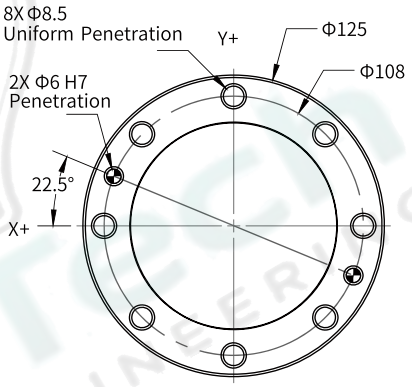
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DYDW-γ125 Multi-axial force sensor









Product Reviews

Characteristic

Made of high strength high quality 17-4PH stainless steel, with yield strength, high overload capacity. The international high standard strain gauge chip can achieve high resolution, high response frequency and high test accuracy. 100% autonomous structure design, factory carefully tested, coupling accuracy is extremely high. A variety of communication interface protocols can be selected, basically covering domestic and foreign mainstream collaborative robot interfaces. Provide debugging software or test software. Flexible cable with high bending resistance.

Application Area

- Rehabilitation Medical Equipment
- Biobiomimetic Experiments
- Vehicle Lift Test
- Machine human control grinding, assembly, dragging teaching and various scientific research.

γ125 Series Common Specification Model				
Model		γ125-3KNX6	γ125-10KNX6	γ125-20KNX6
Range	Fx/Fy/Fz	3KN/3KN/3KN	10KN/10KN/10KN	20KN/20KN/20KN
	Tx/Ty/Tz	100N.m	300N.m	500N.m

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DYDW-γ125 Multi-axial force sensor

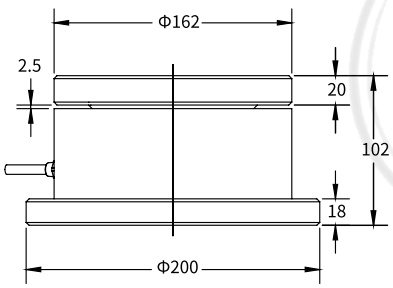
Parameters Table	
Mechanical Features	
Weight	~3kg
Material quality	Stainless Steel/17-4PH
Size	Φ80mm×17mm
Levels Of Protection	IP65
Overload Capacity	300%F.S
Stiffness (Calculation)	Fx 1.6x10^7 N/m
	Fy 1.6x10^7 N/m
	Fz 1.3x10^7 N/m
	Tx 6059.99Nm/rad
	Ty 6059.99Nm/rad
	Tz 10056.99Nm/rad
Electrical Features	
Input / Output Impedance	350 Ω
Communication Interface	Mv matrix
Working Voltage	5-15V DC
Cable Length	5m
Accuracy Class	
Resolution Ratio	Better than 0.1%FS
Nolinear	Better than 0.2%FS
Accuracy	Better than 0.3%FS
Repeatability	Better than 0.2%FS
Coupling Accuracy	Better than 1.5%FS
Hysteresis Accuracy	Better than 0.3%FS
Temperature Features	
Temperature Zero Drift	0.2%F.S/10℃
Zero Drift	0.1%F.S/30min
Storage Temperature	-25℃~70℃
Service Environment	0℃~40℃，20~80% RH
Extended Interface	0±10v, /Ethercat,/Modbus-TCP,/Ethernet,/Canopen,/Modbus-RTU

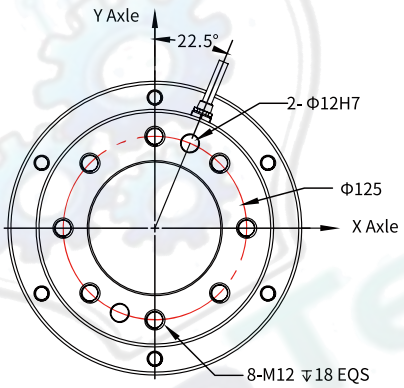
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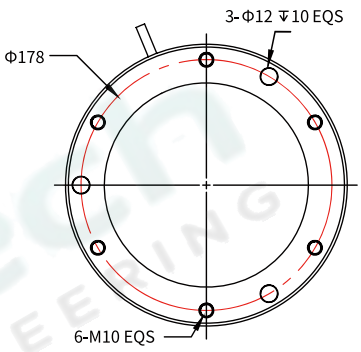
DYDW-γ200 Multi-axial force sensor











Product Reviews

Characteristic

Made of high strength high quality 17-4PH stainless steel, with yield strength, high overload capacity. The international high standard strain gauge chip can achieve high resolution, high response frequency and high test accuracy. 100% autonomous structure design, factory carefully tested, coupling accuracy is extremely high. A variety of communication interface protocols can be selected, basically covering domestic and foreign mainstream collaborative robot interfaces. Provide debugging software or test software. Flexible cable with high bending resistance.

Application Area

- Rehabilitation Medical Equipment
- Biobiomimetic Experiments
- Vehicle Lift Test
- Machine human control grinding, assembly, dragging teaching and various scientific research.

γ200 Series Common Specification Model				
Model		γ200-30KNX6	γ200-60KNX6	γ200-100KNX6
Range	Fx/Fy/Fz	30KN/30KN/30KN	60KN/60KN/60KN	100KN/100KN/100KN
	Tx/Ty/Tz	1000N.m	3000N.m	5000N.m

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DYDW-γ200 Multi-axial force sensor

Parameters Table	
Mechanical Features	
Weight	~220g
Material quality	Aluminium Alloy
Size	Φ80mm×17mm
Levels Of Protection	IP65
Overload Capacity	300%F.S
Stiffness (Calculation)	Fx 1.6x10^7 N/m
	Fy 1.6x10^7 N/m
	Fz 1.3x10^7 N/m
	Tx 6059.99Nm/rad
	Ty 6059.99Nm/rad
	Tz 10056.99Nm/rad
Electrical Features	
Input / Output Impedance	350 Ω
Communication Interface	Mv matrix
Working Voltage	5-15V DC
Cable Length	5m
Accuracy Class	
Resolution Ratio	Better than 0.1%FS
Nolinear	Better than 0.2%FS
Accuracy	Better than 0.3%FS
Repeatability	Better than 0.2%FS
Coupling Accuracy	Better than 1.5%FS
Hysteresis Accuracy	Better than 0.3%FS
Temperature Features	
Temperature Zero Drift	0.2%F.S/10℃
Zero Drift	0.1%F.S/30min
Storage Temperature	-25℃~70℃
Service Environment	0℃~40℃，20~80% RH
Extended Interface	0±10v, /Ethercat,/Modbus-TCP,/Ethernet,/Canopen,/Modbus-RTU

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