

Non-Contact Magnetostrictive Position Sensor

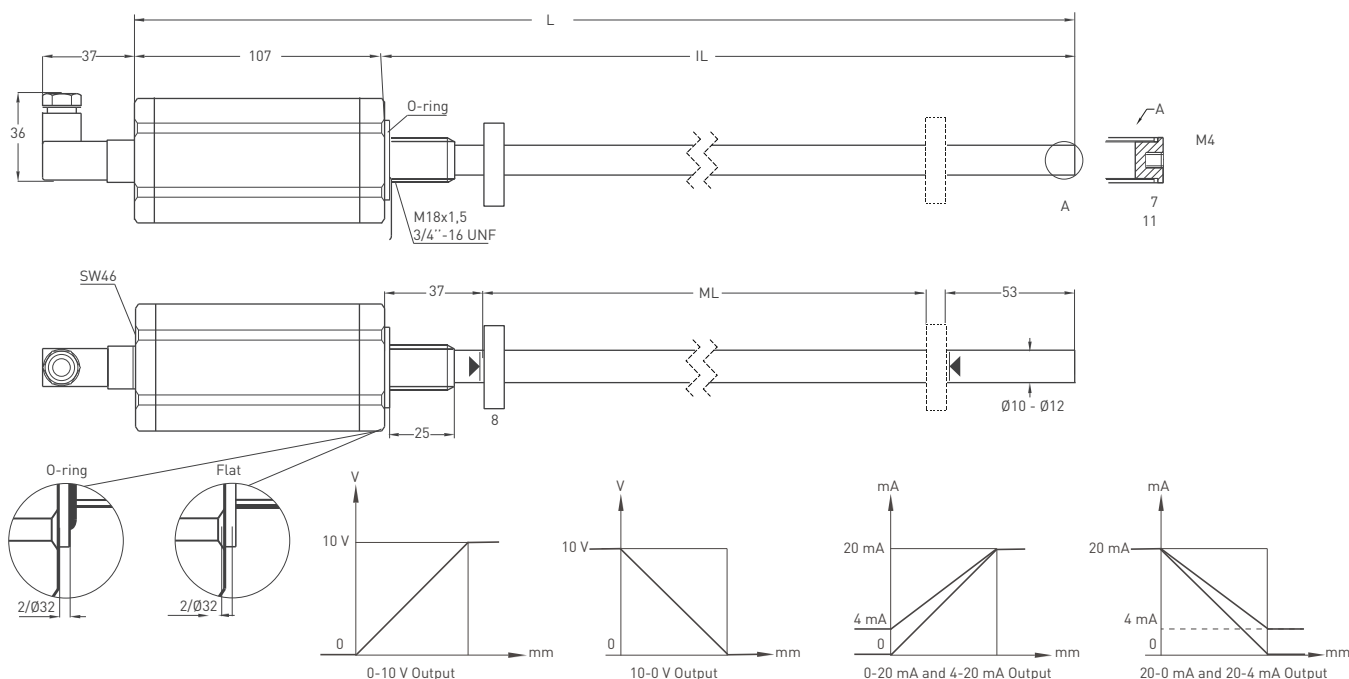
- Measuring length 50 - 5000 mm
- 12 - 16 bit resolution
- Optional mechanical installation
- Speed information can be provided optionally.



Technical Specifications

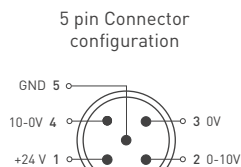
Measurement stroke	50 to 5000 mm
Resolution	12 - 16 bit DAC output
Repeatability	100 µm
Output	0-10V, 10-0V, 0-20 mA, 20-0 mA, 4-20 mA, 20-4 mA (Speed information can be provided optionally.)
Power supply	24 VDC (22 - 26 V)
Displacement speed	max. < 5 m/s
Linearity	100 mm < %1, 100-500 mm > %0.8, 500-1000 mm > %0.5, 1000-2500 mm > %0.2
Sampling rate	Up to 2 kHz (depending on stroke length)
Vibration	EN 60068-2-6, 5-200 Hz 200 m/s ² (20g), 2h 30 min each axis {x,y,z}
Shock	EN 60068-2-2:2007 500 m/s ² (50g), 11ms. {x,y,z axis}
Update time	0-600mm, 0,5ms 601-1500mm, 1ms 1501-3000mm, 2ms 3001-5000mm, 3ms
Max. consumption	50 mA - 90 mA (depending on stroke length)
Max. output noise	< 5 mVpp
Max. output value	10.5 Volt
Reverse polarity protection	Up to -30 VDC
Overvoltage protection	Up to +30 VDC
Pressure rating	< 500 bar
Mounting	M18 x 1.5 or 3/4"-16 UNF O-ring or Flat
Case material	Profile :Anodized aluminium, Tube: Stainless steel, Caps: Stainless steel
Protection level	IP 65 - EN 60529
Operating temperature	-10°C ... +70°C
Storage temperature	-30°C ... +90°C

Mechanical Specifications

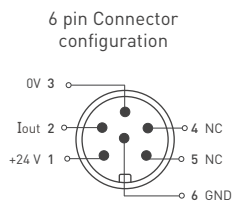


MST[mm]	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1100	1200	1300	1400	1500	1750	2000	2250	2500	3000	4000	5000
ML (Measuring Length)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1100	1200	1300	1400	1500	1750	2000	2250	2500	3000	4000	5000
IL (Installation Length)	148	198	248	298	348	398	448	498	548	598	648	698	748	798	848	898	948	998	1098	1198	1298	1398	1498	1598	1848	2098	2348	2686	3186	4186	5186
L (Total Length)	255	305	355	405	455	505	555	605	655	705	755	805	855	905	955	1005	1055	1105	1205	1305	1405	1505	1605	1705	1955	2298	2548	2798	3318	4318	5318
Dead Zone Calculation	37/53 mm																														

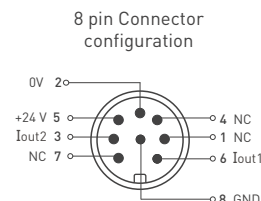
Round Connector



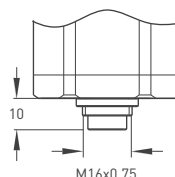
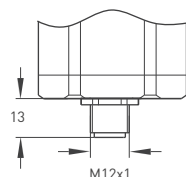
CN5 M12 (A) / M16 (B)
5 pin



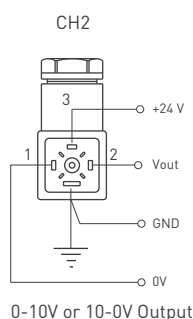
CN6 M12 (A) / M16 (B)
6 pin



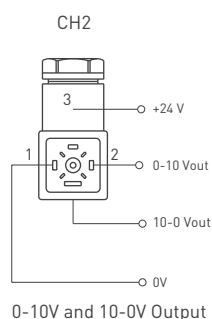
CN8 M12 (A) / M16 (B)
8 pin



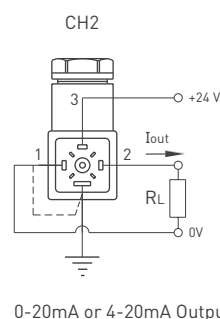
Hydraulic Type Connector



0-10V or 10-0V Output

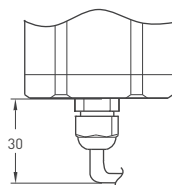


0-10V and 10-0V Output



0-20mA or 4-20mA Output

Cable



Voltage Output

+V : Brown
0V : Blue
0V sense : Black
Output 1 : White (0-10V)
Output 2 : Orange (10-0V)
Earth : Shield

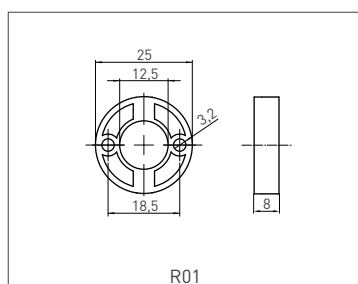
Current Output

+V : Brown
0V : Blue
0V sense : Black
Output 1 : White (Iout1)
Output 2 : Orange (Iout2)
Earth : Shield

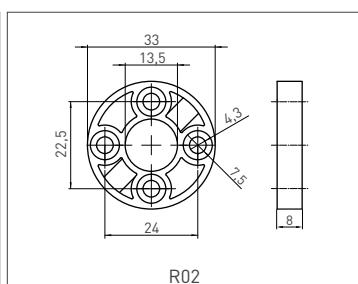
Cable Length

1M : 1 meter (standard)
(Different cable length optional.)

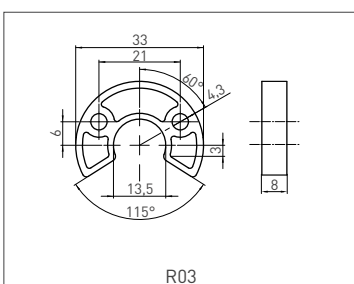
Cursor



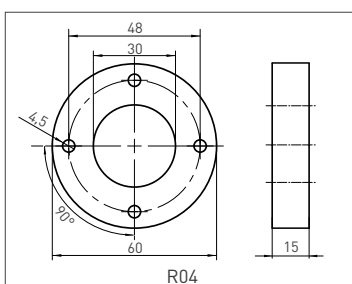
R01



R02



R03



R04

Ordering Procedure

Model	Measuring range	Rod & Thread	Sealing surface	Resolution	Cursor	Output1	Output2 (optional)	Connector / Cable	Dead zone
MST	900	E12	S	A	1R02	V10	Sxxx	CH2	37/53
MST	50 - 5000 mm	E10 : Ø10, M18x1,5 E12 : Ø12, M18x1,5 U10 : Ø10, 3/4"-16 UNF U12 : Ø12, 3/4"-16 UNF E010 : Ø10, M24x1,5 E012 : Ø12, M24x1,5 EA10 : Ø10, M24x1,5 EA12 : Ø12, M24x1,5 EB10 : Ø10, M30x2 EB12 : Ø12, M30x2	S: O-ring F: Flat	A: 16 bit B: 15 bit C: 14 bit D: 13 bit E: 12 bit	1R01: 25 mm 1R02: 33 mm 1R03: 33 mm 1R04: 60 mm 1R01: 1 cursor 2R01: 2 cursor	V10 : 0-10V I40 : 4-20mA 2V10 : 0-10V/0-10V 2I40 : 4-20mA/4-20mA V01 : 10-0V I04 : 20-4mA 2V01 : 10-0V/10-0V 2I04 : 20-4mA/20-4mA V11 : 0-10V/10-0V I41 : 4-20mA/20-4mA V50 : 0-5V I20 : 0-20mA 2V50 : 0-5V/0-5V 2I20 : 0-20mA/0-20mA V05 : 5-0V I02 : 20-0mA 2V05 : 5-0V/5-0V 2I02 : 20-0mA/20-0mA V51 : 0-5V/5-0V I21 : 0-20mA/20-0mA	Sxxx S : Speed xxx : max. speed (mm/s)	CH2: Hydraulic type (standard) CN5A: M12 CN5B: M16 CN6A: M12 CN6B: M16 CN8A: M12 CN8B: M16 1M: 1 meter (standard) Different cable lengths available (optional)	≤ 2000 mm 30/53 2000-3000 mm 37/53 3000-5000 mm 47/53 5000-7000 mm 57/53 7000-9000 mm 67/53 9000-11000 mm 77/53 11000-13000 mm 87/53 13000-15000 mm 97/53 15000-17000 mm 107/53 17000-19000 mm 117/53 19000-21000 mm 127/53 21000-23000 mm 137/53 23000-25000 mm 147/53 25000-27000 mm 157/53 27000-29000 mm 167/53 29000-31000 mm 177/53 31000-33000 mm 187/53 33000-35000 mm 197/53 35000-37000 mm 207/53 37000-39000 mm 217/53 39000-41000 mm 227/53 41000-43000 mm 237/53 43000-45000 mm 247/53 45000-47000 mm 257/53 47000-49000 mm 267/53 49000-51000 mm 277/53 51000-53000 mm 287/53 53000-55000 mm 297/53 55000-57000 mm 307/53 57000-59000 mm 317/53 59000-61000 mm 327/53 61000-63000 mm 337/53 63000-65000 mm 347/53 65000-67000 mm 357/53 67000-69000 mm 367/53 69000-71000 mm 377/53 71000-73000 mm 387/53 73000-75000 mm 397/53 75000-77000 mm 407/53 77000-79000 mm 417/53 79000-81000 mm 427/53 81000-83000 mm 437/53 83000-85000 mm 447/53 85000-87000 mm 457/53 87000-89000 mm 467/53 89000-91000 mm 477/53 91000-93000 mm 487/53 93000-95000 mm 497/53 95000-97000 mm 507/53 97000-99000 mm 517/53 99000-101000 mm 527/53 101000-103000 mm 537/53 103000-105000 mm 547/53 105000-107000 mm 557/53 107000-109000 mm 567/53 109000-111000 mm 577/53 111000-113000 mm 587/53 113000-115000 mm 597/53 115000-117000 mm 607/53 117000-119000 mm 617/53 119000-121000 mm 627/53 121000-123000 mm 637/53 123000-125000 mm 647/53 125000-127000 mm 657/53 127000-129000 mm 667/53 129000-131000 mm 677/53 131000-133000 mm 687/53 133000-135000 mm 697/53 135000-137000 mm 707/53 137000-139000 mm 717/53 139000-141000 mm 727/53 141000-143000 mm 737/53 143000-145000 mm 747/53 145000-147000 mm 757/53 147000-149000 mm 767/53 149000-151000 mm 777/53 151000-153000 mm 787/53 153000-155000 mm 797/53 155000-157000 mm 807/53 157000-159000 mm 817/53 159000-161000 mm 827/53 161000-163000 mm 837/53 163000-165000 mm 847/53 165000-167000 mm 857/53 167000-169000 mm 867/53 169000-171000 mm 877/53 171000-173000 mm 887/53 173000-175000 mm 897/53 175000-177000 mm 907/53 177000-179000 mm 917/53 179000-181000 mm 927/53 181000-183000 mm 937/53 183000-185000 mm 947/53 185000-187000 mm 957/53 187000-189000 mm 967/53 189000-191000 mm 977/53 191000-193000 mm 987/53 193000-195000 mm 997/53 195000-197000 mm 1007/53 197000-199000 mm 1017/53 199000-201000 mm 1027/53 201000-203000 mm 1037/53 203000-205000 mm 1047/53 205000-207000 mm 1057/53 207000-209000 mm 1067/53 209000-211000 mm 1077/53 211000-213000 mm 1087/53 213000-215000 mm 1097/53 215000-217000 mm 1107/53 217000-219000 mm 1117/53 219000-221000 mm 1127/53 221000-223000 mm 1137/53 223000-225000 mm 1147/53 225000-227000 mm 1157/53 227000-229000 mm 1167/53 229000-231000 mm 1177/53 231000-233000 mm 1187/53 233000-235000 mm 1197/53 235000-237000 mm 1207/53 237000-239000 mm 1217/53 239000-241000 mm 1227/53 241000-243000 mm 1237/53 243000-245000 mm 1247/53 245000-247000 mm 1257/53 247000-249000 mm 1267/53 249000-251000 mm 1277/53 251000-253000 mm 1287/53 253000-255000 mm 1297/53 255000-257000 mm 1307/53 257000-259000 mm 1317/53 259000-261000 mm 1327/53 261000-263000 mm 1337/53 263000-265000 mm 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1747/53 345000-347000 mm 1757/53 347000-349000 mm 1767/53 349000-351000 mm 1777/53 351000-353000 mm 1787/53 353000-355000 mm 1797/53 355000-357000 mm 1807/53 357000-359000 mm 1817/53 359000-361000 mm 1827/53 361000-363000 mm 1837/53 363000-365000 mm 1847/53 365000-367000 mm 1857/53 367000-369000 mm 1867/53 369000-371000 mm 1877/53 371000-373000 mm 1887/53 373000-375000 mm 1897/53 375000-377000 mm 1907/53 377000-379000 mm 1917/53 379000-381000 mm 1927/53 381000-383000 mm 1937/53 383000-385000 mm 1947/53 385000-387000 mm 1957/53 387000-389000 mm 1967/53 389000-391000 mm 1977/53 391000-393000 mm 1987/53 393000-395000 mm 1997/53 395000-397000 mm 2007/53 397000-399000 mm 2017/53 399000-401000 mm 2027/53 401000-403000 mm 2037/53 403000-405000 mm 2047/53 405000-407000 mm 2057/53 407000-409000 mm 2067/53 409000-411000 mm 2077/53 411000-413000 mm 2087/53 413000-415000 mm 2097/53 415000-417000 mm 2107/53 417000-419000 mm 2117/53 419000-421000 mm 2127/53 421000-423000 mm 2137/53 423000-425000 mm 2147/53 425000-427000 mm 2157/53 427000-429000 mm 2167/53 429000-431000 mm 2177/53 431000-433000 mm 2187/53 433000-435000 mm 2197/53 435000-437000 mm 2207/53 437000-439000 mm 2217/53 439000-441000 mm 2227/53 441000-443000 mm 2237/53 443000-445000 mm 2247/53 445000-447000 mm 2257/53 447000-449000 mm 2267/53 449000-451000 mm 2277/53 451000-453000 mm 2287/53 453000-455000 mm 2297/53 455000-457000 mm 2307/53 457000-459000 mm 2317/53 459000-461000 mm 2327/53 461000-463000 mm 2337/53 463000-465000 mm 2347/53 465000-467000 mm 2357/53 467000-469000 mm 2367/53 469000-471000 mm 2377/53 471000-473000 mm 2387/53 473000-475000 mm 2397/53 475000-477000 mm 2407/53 477000-479000 mm 2417/53 479000-481000 mm 2427/53 481000-483000 mm 2437/53 483000-485000 mm 2447/53 485000-487000 mm 2457/53 487000-489000 mm 2467/53 489000-491000 mm 2477/53 491000-493000 mm 2487/53 493000-495000 mm 2497/53 495000-497000 mm 2507/53 497000-499000 mm 2517/53 499000-501000 mm 2527/53 501000-503000 mm 2537/53 503000-505000 mm 2547/53 505000-507000 mm 2557/53 507000-509000 mm 2567/53 509000-511000 mm 2577/53 511000-513000 mm 2587/53 513000-515000 mm 2597/53 515000-517000 mm 2607/53 517000-519000 mm 2617/53 519000-521000 mm 2627/53 521000-523000 mm 2637/53 523000-525000 mm 2647/53 525000-527000 mm 2657/53 527000-529000 mm 2667/53 529000-531000 mm 2677/53 531000-533000 mm 2687/53 533000-535000 mm 2697/53 535000-537000 mm 2707/53 537000-539000 mm 2717/53 539000-541000 mm 2727/53 541000-543000 mm 2737/53 543000-545000 mm 2747/53 545000-547000 mm 2757/53 547000-549000 mm 2767/53 549000-551000 mm 2777/53 551000-553000 mm 2787/53 553000-555000 mm 2797/53 555000-557000 mm 2807/53 557000-559000 mm 2817/53 559000-561000 mm 2827/53 561000-563000 mm 2837/53 563000-565000 mm 2847/53 565000-567000 mm 2857/53 567000-569000 mm 2867/53 569000-571000 mm 2877/53 571000-573000 mm 2887/53 573000-575000 mm 2897/53 575000-577000 mm 2907/53 577000-579000 mm 2917/53 579000-581000 mm 2927/53 581000-583000 mm 2937/53 583000-585000 mm 2947/53 585000-587000 mm 2957/53 587000-589000 mm 2967/53 589000-591000 mm 2977/53 591000-593000 mm 2987/53 593000-595000 mm 2997/53 595000-597000 mm 3007/53 597000-599000 mm 3017/53 599000-601000 mm 3027/53 601000-603000 mm 3037/53 603000-605000 mm 3047/53 605000-607000 mm 3057/53 607000-609000 mm 3067/53 609000-611000 mm 3077/53 611000-613000 mm 3087/53 613000-615000 mm 3097/53 615000-617000 mm 3107/53 617000-619000 mm 3117/53 619000-621000 mm 3127/53 621000-623000 mm 3137/53 623000-625000 mm 3147/53 625000-627000 mm 3157/53 627000-629000 mm 3167/53 629000-631000 mm 3177/53 631000-633000 mm 3187/53 633000-635000 mm 3197/53 635000-637000 mm 3207/53 637000-639000 mm 3217/53 639000-641000 mm 3227/53 641000-643000 mm 3237/53 643000-645000 mm 3247/53 645000-647000 mm 3257/53 647000-649000 mm 3267/53 649000-651000 mm 3277/53 651000-653000 mm 3287/53 653000-655000 mm 3297/53 655000-657000 mm 3307/53 657000-659000 mm 3317/53 659000-661000 mm 3327/53 661000-663000 mm 3337/53 663000-665000 mm 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3747/53 745000-747000 mm 3757/53 747000-749000 mm 3767/53 749000-751000 mm 3777/53 751000-753000 mm 3787/53 753000-755000 mm 3797/53 755000-757000 mm 3807/53 757000-759000 mm 3817/53 759000-761000 mm 3827/53 761000-763000 mm 3837/53 763000-765000 mm 3847/53 765000-767000 mm 3857/53 767000-769000 mm 3867/53 769000-771000 mm 3877/53 771000-773000 mm 3887/53 773000-775000 mm 3897/53 775000-777000 mm 3907/53 777000-779000 mm 3917/53 779000-781000 mm 3927/53 781000-783000 mm 3937/53 783000-785000 mm 3947/53 785000-787000 mm 3957/53 787000-789000 mm 3967/53 789000-791000 mm 3977/53 791000-793000 mm 3987/53 793000-795000 mm 3997/53 795000-797000 mm 4