

Fuelling products

Pressure fuelling nozzles

HU4000 series hose end pressure refuelling coupling

HU4000 series hose end pressure refuelling coupling



Key Features

- Unique internal safety interlock integral to the poppet
- Six slot engagement for easier coupling location
- Independent swivel improves ease of coupling
- Improved choice of operation with three handle options
- Nose seal replaceable without depressurising
- Well proven MK six pressure controller
- Suitable for all current aircraft types
- Robust, lightweight construction

Proven Design Features Retained

Safety in refuelling is of paramount importance. Meggitt's unique internal safety interlock utilises the poppet as an integral part of the interlock system and is therefore not reliant on secondary interlock components. The coupling is unaffected by wear in the aircraft unit slots and tolerates a high level of wear to the lugs. In addition the design of the HU4000 does not cause excessive wear to the aircraft unit.

HU4000 series design includes a wider range of hose adaptor designs, relocation of the swivels, three new handle types, and new operating lever design.

Spares and service requirements are also important in this change of design. Ease of maintenance and spares compatibility with its predecessor has been retained.

Meggitt Control Systems

Our product competencies & services:
Aerospace valves | Thermal management solutions | Environmental control systems | Electro-mechanical products
Ground fuelling products | Energy products | Aftermarket services

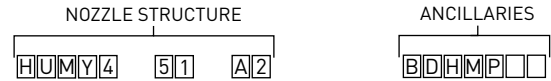
MEGGITT
smart engineering for
extreme environments

Fuelling products

Pressure fuelling nozzles

HU4000 series hose end pressure refuelling coupling

HUMY4000M2 series hose unit - coding chart



NOZZLE STRUCTURE **51**

SURGE CONTROLLER/ADAPTOR					
CODE	DESCRIPTION	PART No.	CODE	DESCRIPTION	PART No.
00	NO SURGE CONTROLLER/NO ADATER	NOT AVAIL	33	30psi MAX. SURGE CONTROLLER/A-H 90° ELBOW ADAPTOR	NOT AVAIL
01	NO SURGE CONTROLLER/A-H STANDARD ADAPTOR	HUMZ4400	43	45psi MAX. SURGE CONTROLLER/A-H 90° ELBOW ADAPTOR	HUMZ4400
02	NO SURGE CONTROLLER/A-H 45° ELBOW ADAPTER	HUMZ4402	53	50psi MAX. SURGE CONTROLLER/A-H 90° ELBOW ADAPTOR	HUMZ4402
03	NO SURGE CONTROLLER/A-H 90° ELBOW ADAPTER	HUMZ4403	63	55psi MAX. SURGE CONTROLLER/A-H 90° ELBOW ADAPTOR	HUMZ4403
04	NO SURGE CONTROLLER/FLIGHT REFUELLING ADAPTER	HUMZ4401	34	30psi MAX. SURGE CONTROLLER/FL-R STANDARD ADAPTOR	HUMZ4401
05	NO SURGE CONTROLLER/THEIM PROFILE ADAPTER (N/D)	(HUMZ4404)	44	45psi MAX. SURGE CONTROLLER/FL-R STANDARD ADAPTOR	(HUMZ4404)
06	NO SURGE CONTROLLER/CARTER PROFILE ADAPTER (N/D)	(HUMZ4405)	54	50psi MAX. SURGE CONTROLLER/FL-R STANDARD ADAPTOR	(HUMZ4405)
07	NO SURGE CONTROLLER/ 45° CARTER PROFILE ADAPTER (N/D)	(HUMZ4406)	64	55psi MAX. SURGE CONTROLLER/FL-R STANDARD ADAPTOR	(HUMZ4406)
30	30psi MAX. SURGE CONTROLLER ADAPTOR	HUMZ4500	35	30psi MAX. SURGE CONTROLLER/THEIM PROFILE ADAPTER (N/D)	HUMZ4500
40	45psi MAX. SURGE CONTROLLER ADAPTOR	HUMZ4501	45	45psi MAX. SURGE CONTROLLER/THEIM PROFILE ADAPTER (N/D)	HUMZ4501
50	50psi MAX. SURGE CONTROLLER ADAPTOR	HUMZ4502	55	50psi MAX. SURGE CONTROLLER/THEIM PROFILE ADAPTER (N/D)	HUMZ4502
60	55psi MAX. SURGE CONTROLLER ADAPTOR	HUMZ4503	65	55psi MAX. SURGE CONTROLLER/THEIM PROFILE ADAPTER (N/D)	HUMZ4503
21	55psi MAX. DOUBLE SURGE CONTROLLER/A-H STANDARD ADAPTOR	HUMZ4546	36	30psi MAX. SURGE CONTROLLER/THEIM PROFILE ADAPTER (N/D)	HUMZ4546
31	30psi MAX. SURGE CONTROLLER/A-H STANDARD ADAPTOR	HUMZ4504	46	30psi MAX. SURGE CONTROLLER/CARTER PROFILE ADAPTER (N/D)	HUMZ4504
41	45psi MAX. SURGE CONTROLLER/A-H STANDARD ADAPTOR	HUMZ4505	56	45psi MAX. SURGE CONTROLLER/CARTER PROFILE ADAPTER (N/D)	HUMZ4505
51	50psi MAX. SURGE CONTROLLER/A-H STANDARD ADAPTOR	HUMZ4506	66	50psi MAX. SURGE CONTROLLER/CARTER PROFILE ADAPTER (N/D)	HUMZ4506
61	55psi MAX. SURGE CONTROLLER/A-H STANDARD ADAPTOR	HUMZ4507	37	55psi MAX. SURGE CONTROLLER/CARTER PROFILE ADAPTER (N/D)	HUMZ4507
32	30psi MAX. SURGE CONTROLLER/A-H 45° ELBOW ADAPTOR	HUMZ4550	47	30psi MAX. SURGE CONTROLLER/ 45° CARTER PROFILE ADAPTER (N/D)	HUMZ4550
42	45psi MAX. SURGE CONTROLLER/A-H 45° ELBOW ADAPTOR	HUMZ4551	57	45psi MAX. SURGE CONTROLLER/ 45° CARTER PROFILE ADAPTER (N/D)	HUMZ4551
52	50psi MAX. SURGE CONTROLLER/A-H 45° ELBOW ADAPTOR	HUMZ4552	67	50psi MAX. SURGE CONTROLLER/ 45° CARTER PROFILE ADAPTER (N/D)	HUMZ4552
62	55psi MAX. SURGE CONTROLLER/A-H 45° ELBOW ADAPTOR	HUMZ4553			

NOZZLE STRUCTURE **A2**

HOSE CONNECTORS		THREAD OPTIONS AND CODES					
CODE	DESCRIPTION	1	2	3	6	7	8
		2" BSP	2.5" BSP	3" BSP	2" NPT	2.5" NPT	3" NPT
A	LIGHT WEIGHT QUICK DISCONNECT		HUMZ4561	HUMZ4562		HUMZ4563	HUMZ4564
L	QUICK DISCONNECT ISOLATING VALVE LOCKING SCREW TYPE	HUMZ3671	HUMZ3670		HUMZ3673	HUMZ3672	
Q	QUICK DISCONNECT STANDARD		HUMZ4412	HUMZ4413		HUMZ4414	HUMZ4415
S	SWIVEL		HUMZ4416	HUMZ4417		HUMZ4418	HUMZ4419
V	QUICK DISCONNECT ISOLATING VALVE PUSH BUTTON TYPE	HUMZ3667	HUMZ3666		HUMZ3669	HUMZ3668	

NOTE:
 1. CODES P, X AND Y ARE NOT APPLICABLE WHEN SURGE CONTROLLER/ADAPTOR CODE ENDS IN 0, 1, E CODE 30 IS SELECTED.
 2. CODE P IS NOT REQUIRED IF RING HANDLES (CODE R) IS FITTED.
 3. CODE P IS NOT APPLICABLE IF SURGE CONTROLLER/ADAPTOR CODE STARTS WITH A 0, 1, E CODE 03 IS SELECTED (NO SURGE CONTROLLER FITTED)
 4. CODE X OR Y IS NOT APPLICABLE IF SURGE CONTROLLER/ADAPTER OR CODE ENDS WITH A 0 OR 3, I.E. CODE 40 OR 53 IS SELECTED (NO ADAPTER FITTED OR A - H 90° ELBOW ADAPTOR FITTED).
 5. SURGE CONTROLLER/ADAPTOR CODE ENDING IN 5, 6 OR 7 (I.E. CODE 35) ARE NOT STANDARD, HAVE NOT BEEN DRAWN OR CONFIGURED.
 6. SURGE CONTROLLER/ADAPTOR CODES ENDING IN 5, 6 OR 7 (I.E. CODE 35) SHOULD BE CONSIDERED AS SPECIAL SURGE CONTROLLERS/ADAPTORS.

ANCILLARIES **BDHMP**

ANCILLARIES			
ADD LETTERS ONLY IF ANCILLARY OPTIONS ARE REQUIRED (PLACE IN ORDER AS LISTED)			
CODE	DESCRIPTION	PART No.	CODE
B	BONDING CABLE	HUMZ1366	
D	DUST CAP - STANDARD	HUMZ4362	ALL BUILDS (EXTERNAL & INTERNAL - SELECTIVE AND NON-SELECTIVE)
G	GAMMON JET TEST ADAPTOR AND VENT PORT ADAPTOR	HUMZ4542	FITTED AS ALTERNATIVE TO A PLUG IN THE HOSE UNIT & VENT PORT IN THE SURGE CONTR.
H/J/K	(H) VACUUM RELIWEF VALVE 10"Hg (J) VACUUM RELIWEF VALVE 15"Hg (K) VACUUM RELIWEF VALVE 22"Hg	HUMZ3635-1 HUMZ3635-2 HUMZ3635-3	
M/N	(M) SELECTIVITY, POSITIONS 1, 2, & 3 (N) SELECTIVITY, POSITIONS 4 & 5	HUMZ4331 HUMZ4332	FACTORY SET TO POSITION 1 FACTORY SET TO POSITION 4
P	PROTECTION RING	HUPZ3580	NOT REQUIRED IF RING HANDLES ARE FITTED CANNOT BE USED ON BUILDS WITH NO SURGE CONTROLLER
R/T/W	(R) RING HANDLE (T) STIRRUP HANDLE (W) NO HANDLES FITTED	HUAZ4357 HUAZ4358	FITTED IN PLACE OF STANDARD STICK HANDLES
C	STICK HANDLE (FIT AS STANDARD)	HUMZ4353	FITTED AS STANDARD
X	60 MESH STRAINER (INSTEAD OF 100 MESH STRAINER)	HUSZ4422 HUSZ4423	(SHORT) NO SURGE/CONTR. (LONG) WITH SURGE/CONTR.
Y	100 MESH STRAINER (FITTED AS STANDARD)	HUSZ4421 HUSZ3312	(SHORT) NO SURGE/CONTR. (LONG) WITH SURGE/CONTR.
Z	EXTREME COLD WEATHER SEALS	PHHL4010	FLUCRO-SILICON SEALS REPLACING STANDARD FLOURCARBON SEALS (FITTED AS KIT-SET)
V			NO STRAINER WITH TYPE 0 OR 3 ADAPTORS

Meggitt Control Systems

Our product competencies & services:
 Aerospace valves | Thermal management solutions | Environmental control systems | Electro-mechanical products
 Ground fuelling products | Energy products | Aftermarket services

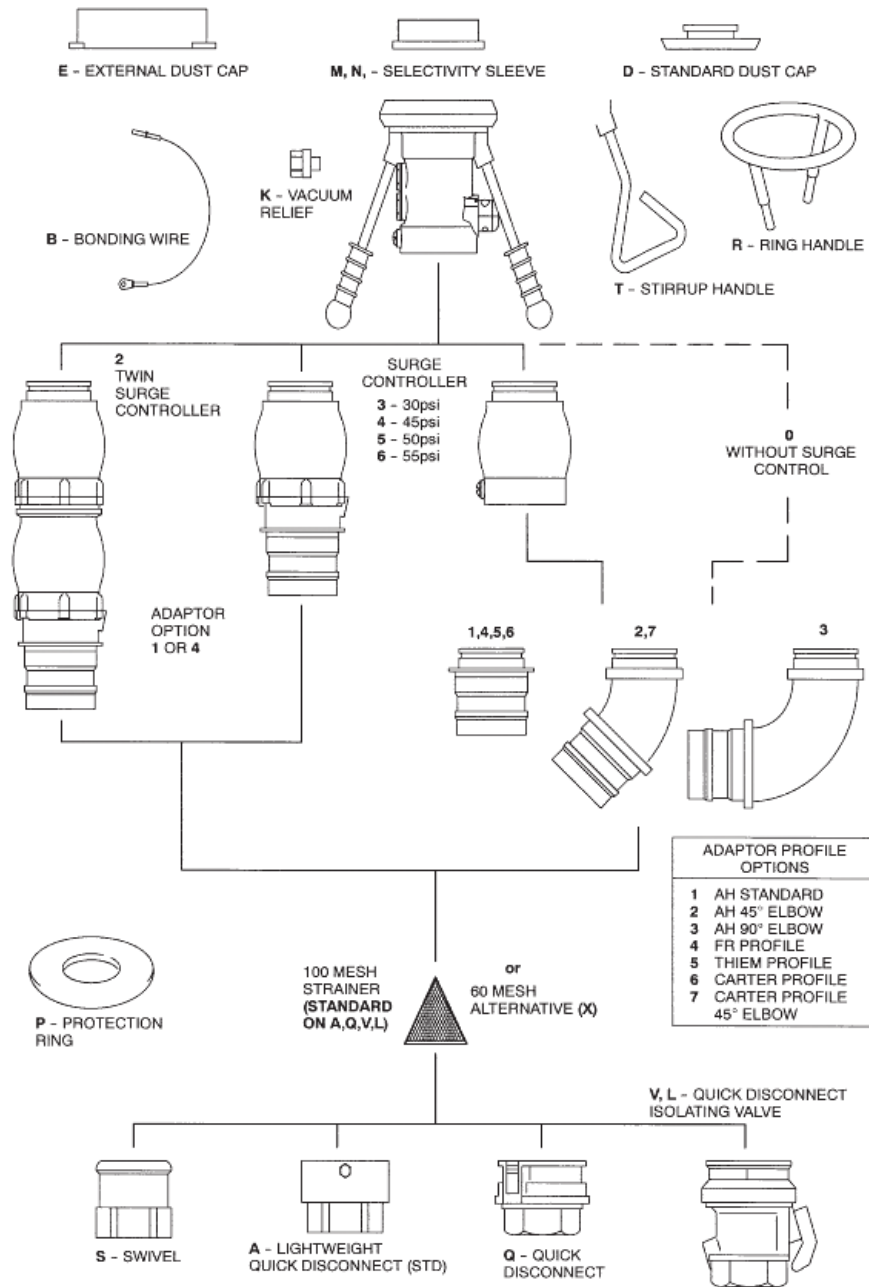
MEGGITT
 smart engineering for
 extreme environments

Fuelling products

Pressure fuelling nozzles

HU4000 series hose end pressure refuelling coupling

Specification



Meggitt Control Systems

Our product competencies & services:
Aerospace valves | Thermal management solutions | Environmental control systems | Electro-mechanical products
Ground fuelling products | Energy products | Aftermarket services

MEGGITT
smart engineering for
extreme environments

Fuelling products

Pressure fuelling nozzles

HU4000 series hose end pressure refuelling coupling

Specification

PRESSURE RATING

Max Working Pressure:	10.3 bar(150psi)
Test Pressure:	15.5 bar (225 psi)
Max. Flow Rate:	2275 lpm
	500 l gpm
	600 US gpm

PRESSURE DROP (including aircraft adaptor)

Nozzle with quick-disconnect and 100 mesh strainer
at 1895 lpm. 1.03 bar (14.9 psi)

As above plus surge-controller.
1.79 bar (26.0 psi)

STRENGTH

Although over a kilo lighter than its predecessor, the HU4000 retains its basic strength and has been rigorously tested to ensure safe operation under normal operating conditions.

COMPATIBILITY

British Standard Aerospace Specification 4C14 International Standards Organisation ISO R45NATO Stanag 3105 Designed to meet the requirements of MIL-N-5877E.

Meggitt Control Systems

Our product competencies & services:
Aerospace valves | Thermal management solutions | Environmental control systems | Electro-mechanical products
Ground fuelling products | Energy products | Aftermarket services

MEGGITT
smart engineering for
extreme environments

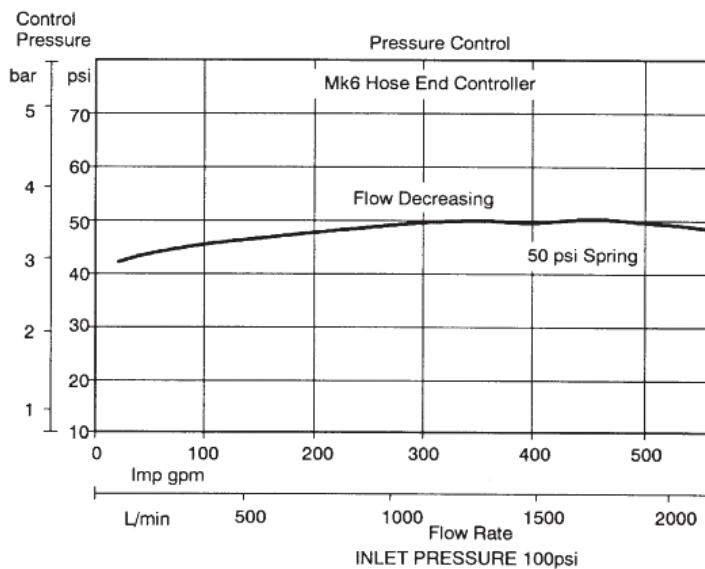
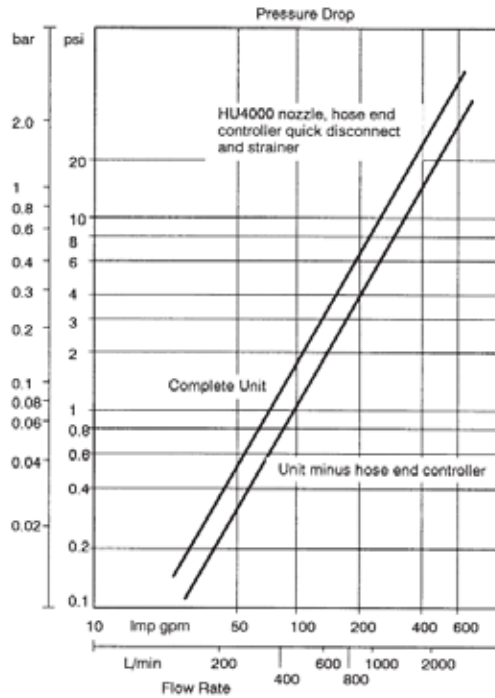
Fuelling products

Pressure fuelling nozzles

HU4000 series hose end pressure refuelling coupling

Specification

Typical performance curves



Meggitt Control Systems

Our product competencies & services:
Aerospace valves | Thermal management solutions | Environmental control systems | Electro-mechanical products
Ground fuelling products | Energy products | Aftermarket services

MEGGITT
smart engineering for
extreme environments

Fuelling products

Pressure fuelling nozzles

HU4000 series hose end pressure refuelling coupling

Key Dimensions

LENGTH

Complete nozzle, surge controller and quick disconnect 370mm (14.6 inch)

MATERIALS

Those in contact with the fuel are anodised aluminium alloy, stainless steel, PTFE Viton and high nitrile rubber.

OPERATING TEMPERATURES

-20 deg C to 60 deg C (-4 deg F to +140 deg F)

COLD WEATHER REQUIREMENTS

Special seal kits available for temperatures down to -40°C.

WEIGHTS

Complete nozzle, surge controller and light weight quick disconnect	5.3kg (11.6 lb)
Nozzle assy	2kg 50g
Hose connector assy	640g
Surge control/adaptor	1kg 570g
Stick handle assy (1 set)	680g
Dust cap assy	200g
Protection ring	360g
Vacuum relief valve	60g

Contact

Meggitt North Hollywood

12838 Saticoy Street
North Hollywood
California 91605-3505
USA

Tel: (818) 765-8160

Fax: (818) 759-2194

www.meggitt.com

Meggitt Control Systems

Our product competencies & services:

Aerospace valves | Thermal management solutions | Environmental control systems | Electro-mechanical products
Ground fuelling products | Energy products | Aftermarket services

MEGGITT
smart engineering for
extreme environments